Mathematics Assessment
Updates for 2011

End-of-Course
High School Proficiency Exams

Table of Contents

Introduction

Updates for 2011 contains pertinent information for Washington educators. This document includes a summary of changes and new information in mathematics assessment, links to resources for teachers, and sample test items from *Changes for 2010 and Beyond*. *Updates for 2011* has been customized into grade bands: Grades 3-5, Grades 6-8, and End-of-Course Assessments. The documents are available on http://www.k12.wa.us/Mathematics/default.aspx.

Washington State K-12 Mathematics Learning Standards

In 2008, the State Board of Education voted to approve the revised K-8 Mathematics Learning Standards and 9-12 Mathematics Learning Standards for adoption by the Office of Superintendent of Public Instruction (OSPI). Along with the new standards, the legislature provided direction for the redesign of the assessment system. The Measurements of Student Progress (MSP) replaced the Washington Assessment of Student Learning (WASL) and assessed the new mathematics standards in grades 3-8 in the spring of 2010. End-of-course (EOC) exams will replace the High School Proficiency Exam (HSPE) in 2011. These EOC exams will assess the Algebra 1/Integrated Mathematics 1 and Geometry/Integrated Mathematics 2 performance expectations in the spring of 2011.

Overview of the Standards

The *Washington State K-12 Mathematics Learning Standards* outline the mathematics learning expectations for all students in Washington. These standards describe the mathematics content, procedures, applications, and processes that students are expected to learn. The topics and mathematical strands represented across grades K-12 constitute a mathematically complete program that includes the study of numbers, operations, geometry, measurement, algebra, data analysis, probability and important mathematical processes.

The *Washington State K-12 Mathematics Learning Standards* are organized by grade level for grades K-8 and by course for Algebra 1, Integrated Mathematics 1, Geometry, and Integrated Mathematics 2. Each grade/course consists of three elements: *Core Content, Additional Key Content, and Core Processes.* These elements are referred to as Areas of Emphasis in the Test and Item Specifications. *Core Content* areas describe the major mathematical focuses of each grade level or course. *Additional Key Content* contains important expectations that do not warrant the same amount of instructional time as the Core content areas. *Core Process* includes expectations that address reasoning, problem solving, and communication. At the beginning of each of these elements is an introductory paragraph that conveys the essence of the content in a way that should help readers get a clear "sense" of that content.

View the new Washington State K-12 Mathematics Learning Standards at:
http://www.k12.wa.us/Mathematics/Standards.aspx

Test and Item Specifications

The Test and Item Specifications provide guidelines for developing large-scale assessments based on the Washington State K-12 Mathematics Learning Standards that assess the levels of proficiency students have achieved.

The test specifications provide a grade-level or course test map that delineates the type and number of test items in each Area of Emphasis.

The item specifications assist in writing test items that align with the mathematics performance expectations and follow associated restrictions. Restrictions are necessary to construct a valid and reliable statewide on-demand assessment. These restrictions are **not** necessary in classroom-based assessments. Restrictions in items written for the Measurements of Student Progress (MSP) and End-Of-Course exams follow guidelines provided in the Washington K-12 Mathematics Learning Standards. They include limitations and clarifications such as: kinds of numbers, types of geometric figures, types of data displays, etc.

The Test and Item Specifications are periodically updated to:

- clarify performance expectations (e.g. rules, limits, item format);
- incorporate additions/changes recommended as a result of the work of committees convened for the development of items (e.g. Item Writing, Range Finding, Content Review, and Content Review with Data);
- meet new legislative requirements; and
- answer questions from the field.

Included with each updated version of the Test and Item Specifications will be a summary of the changes made since the previous version.

The Test and Item Specifications can be accessed through the following link: http://www.k12.wa.us/Mathematics/TestItemSpec.aspx.

End-of-Course Crosswalks

The purpose of these crosswalks is to identify the standards that are assessed on each end-of-course exam. For each course, the crosswalk identifies the performance expectations that are assessed for purposes of meeting graduation requirements, the performance expectations that are assessed for purposes of reporting student strength/weakness but are not used for purposes of graduation, and the performance expectations that are not assessed on either the end-of-course exams or the end-of-course makeup exams.

Algebra 1
Available at: http://www.k12.wa.us/Mathematics/pubdocs/Algebra1Crosswalk.pdf

Geometry
Available at: http://www.k12.wa.us/Mathematics/pubdocs/GeometryCrosswalk.pdf

Integrated Mathematics 1
Available at: http://www.k12.wa.us/Mathematics/pubdocs/Math1Crosswalk.pdf

Integrated Mathematics 2
Available at: http://www.k12.wa.us/Mathematics/pubdocs/Math2Crosswalk.pdf

For specific information regarding the types of items on the assessments, please refer to the Item Specifications at http://www.k12.wa.us/Mathematics/TestItemSpec.aspx.

Graduation Requirements

All public high school students are required to meet statewide graduation requirements in order to earn a diploma. Click here to learn more about Washington State Graduation Requirements.

Spring 2011 End-of-Course (EOC)/EOC Makeup Exams Testing Window

Beginning in Spring 2011, students will take end-of-course exams in Algebra 1/Integrated Mathematics 1 and Geometry/Integrated Mathematics 2 based on the 2008 Standards. Based on House Bill 1412 which was signed into law by Governor Gregoire on April 11, 2011:

- **Students in the classes of 2013 and 2014** will now have to pass only **one** end-of-course (EOC) math exam instead of two to be eligible for a diploma. Those students shall only take one math exam this spring. Their first retake opportunity will be in January/February 2012.

- **Beginning with the class of 2015**, students will have to pass **two** end-of-course exams. Those students can take two EOC exams (algebra 1 and geometry, or the integrated math equivalents) this spring or defer one of their testing opportunities to 2012.

- **Students in the classes of 2011 and 2012** are not affected by this legislation. Those students can meet the assessment graduation requirement by passing one state math exam or by earning two credits of math after 10th grade.

- Students in seventh and eighth grade who take an Algebra 1/Integrated Mathematics 1 or Geometry/Integrated Mathematics 2 course are required to take the grade-level state MSP assessment (for NCLB purposes) and the appropriate end-of-course exam.

Further guidance on specific requirements for students in each class can be found in the OSPI EOC Policy Handout is located at
http://www.k12.wa.us/GraduationRequirements/pubdocs/OSPI_EOC_Math_Policies.pdf.

Further information regarding EOCs and EOC makeup assessments is located at
http://www.k12.wa.us/GraduationRequirements/MathEnd-of-CourseExams.aspx.

A complete state testing schedule can be accessed at:
http://www.k12.wa.us/assessment/StateTesting/timelines-calendars.aspx#spring2011

Paper/Pencil Schedule (No online testing for EOC)

Year 1	**Year 2**
Algebra 1	Geometry
Integrated Mathematics 1	Integrated Mathematics 2
EOC Makeup Year 1	EOC Makeup Year 2*

***Note:** OSPI is not offering EOC Makeup Year 2 in spring 2011. For more information, see*
http://www.k12.wa.us/GraduationRequirements/pubdocs/OSPI_EOC_Math_Policies.pdf.

End-of-Course Time Study

In October, a set of sample end-of-course exam items was administered to approximately 5,000 students across Washington State. The item set consisted of 20 items that assessed Algebra 1/Integrated Mathematics 1 and Geometry/Integrated Mathematics 2 performance expectations. Participants recorded the number of items completed by each student during a 30-minute timed session and reported their data to OSPI. This data will be used to determine the time students need to complete the end-of-course exams.

The EOC Sample Item Booklet and answer key will be available on the OSPI mathematics website for all teachers to use in their classrooms.

What are the differences between End-of-Course (EOC) Exams and EOC Makeup Exams?

End-of-course exams assess the full range of math standards identified for each course in the Washington State K-12 Mathematics Learning Standards. Each end-of-course exam consists of the following items:

- Multiple-Choice, Completion, and Short-Answer items assessing performance expectations (PEs) common to Algebra 1/Integrated Mathematics 1 or Geometry/Integrated Mathematics 2. These PEs are highlighted in green in the End-of-Course Crosswalks.
- Multiple-Choice and Completion items assessing PEs that identify strengths/weaknesses. These PEs are highlighted in yellow in each End-of-Course Crosswalk.

End-of-course makeup exams assess the math standards that "overlap" in the Washington State K-12 Mathematics Learning Standards. EOC Makeup Year 1 assesses the PEs that are common to both Algebra 1 and Integrated Mathematics 1; EOC Makeup Year 2* assesses the PEs that are common to both Geometry and Integrated Mathematics 2. Each EOC makeup exam consists of the following items:

- Multiple-Choice, Completion, and Short-Answer items assessing PEs common to Algebra 1/Integrated Mathematics 1 or Geometry/Integrated Mathematics 2. These PEs are highlighted in green in the End-of-Course Crosswalks.
- EOC makeup exams do not contain items that assess strengths/weaknesses.

Please see the End-of-Course Crosswalks at http://www.k12.wa.us/Mathematics/Crosswalks.aspx for more information.

***Note:** OSPI is not offering EOC Makeup Year 2 in spring 2011. For more information, see* http://www.k12.wa.us/GraduationRequirements/pubdocs/OSPI_EOC_Math_Policies.pdf.

Guidance for Teachers Preparing Students for EOC Makeup Exams*

Teachers can take the following steps to help prepare their students for an EOC Makeup Exam*:

- Become familiar with the Mathematics Standards assessed on each EOC Makeup exams by reading the End-of-Course Crosswalks and Item Specifications.
- Collaborate with Algebra 1/Integrated Mathematics 1 and Geometry/Integrated Mathematics 2 teachers and obtain copies of classroom unit and benchmark exams if possible.
- Use sample EOC exam items. These are available from a variety of sources:
    - Sample EOC exams items in this document that assess mathematics standards common to Algebra 1/Integrated Mathematics 1 or Geometry/Integrated Mathematics 2*. These are labeled in green.
    - Previously released items that align with the new mathematics standards. Please see the table in this document which shows the alignment of previously released items to the current performance expectations. Items that align with current PEs that are assessed on the EOC Makeup exams are labeled in green.
    - The EOC Sample Item Booklet is a sample of end-of-course items. Some of these items can also be found in this document or in previously released items.
- Embed review and reinforcement of mathematical concepts assessed on the EOC Makeup(s) within classroom instruction through a variety of ways:
    - daily warm-ups
    - weekly review assignments
    - review problems on classroom tests/quizzes (these items may be graded or formative)
    - using problems during classroom instruction that incorporate concepts for review from previous courses within the context of the curriculum of the course.

***Note:** OSPI is not offering EOC Makeup Year 2 in spring 2011. For more information, see* http://www.k12.wa.us/GraduationRequirements/pubdocs/OSPI_EOC_Math_Policies.pdf.

Calculator Use and Restrictions Policy

For grades 7-12 on the Measurements of Student Progress (MSP), End-of-Course (EOC) Assessments, and EOC Makeup Assessments

A scientific calculator is sufficient for all items on the Grade 7 and 8 Measurements of Student Progress (MSP) and all end-of-course (EOC) mathematics assessments. Students need access to the following calculator functions:

- Exponents
- Square root
- Cube root (for all EOC exams)
- Trigonometric functions (for Geometry/Integrated Mathematics 2 and Makeup Year 2)

A Calculator Use and Restrictions Policy for students in grades 7-12 taking the MSP, EOC exams, and EOC makeup exams is currently under development.

Students in grades 3-6 may not use a calculator on the MSP.

Manipulatives and Tools Allowed

on the Measurements of Student Progress (MSP), End-of-Course (EOC) Exams, and EOC Makeup Exams

New content in the K-12 Mathematics Learning Standards has resulted in confusion about which manipulatives are allowed during the state assessments. Use of a variety of manipulatives by teachers during instruction can be beneficial for students to build concrete understanding of mathematical content and procedures. Students are also expected to understand the meaning of symbolic notation, develop fluency, and apply concepts and procedures in problem solving situations. Many performance expectations require students to demonstrate understanding at the symbolic notation, fluency, and application levels. Because of the need to assess these levels of understanding, some manipulatives used in the classroom are not appropriate for use on the state assessments. Of the utmost importance—**manipulatives should not provide answers to items.**

Manipulatives and Tools Allowed	Manipulatives and Tools Not Allowed
Manipulatives that are used during the assessment should not be distributed to the students but should be available in the classroom to students who elect to use them. • Straightedge (all grades) • Ruler with centimeters and inches for grade 3 (required) • Protractor or angle ruler for grade 5 (required) • Abacus for visually impaired/blind students using Braille edition • Tiles, algebra tiles, cubes • Base-ten pieces • Pattern blocks, geoboards, Cuisenaire rods • Judy clocks without a digital display • Glossary of Non-Mathematics Terms *Tools that can remain on teachers' walls:* • Hundreds charts (0-99 or 1-100 only) • Number lines with whole numbers only **Tools that must be collected for shredding, if used:* • Graph paper*	Because of the multitude and variety of materials available, the following list of materials that are not allowed is not exhaustive. Consider all manipulatives "Not Allowed" if they are not listed as "Allowed". The following list addresses the most commonly asked questions concerning manipulative use from the field. • Calculators for grades 3-6 • Multiplication or addition matrices • Number lines with integers, fractions, decimals, or markings of multiples, prime, and/or composite numbers • Commercially- or student-made fraction pieces, fraction templates, or fraction materials, whether labeled or unlabeled • Dictionaries or thesauruses • Patty paper or tracing paper • Dry erase boards • Highlighters

If you have further questions regarding manipulatives contact: Assessment@k12.wa.us.

Mathematics Formula Sheets for End-of-Course Exams

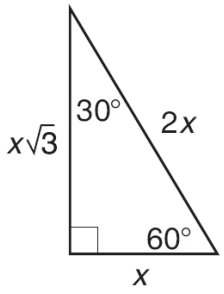
Use at least two decimal place values when approximating square roots or trigonometric ratios.

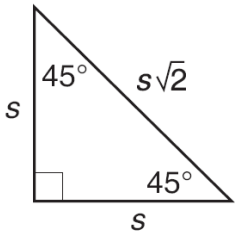
Description	Formula	Variables
Arc Length	$L = \frac{m\overset{\frown}{BC}}{360^\circ}\pi d$	*L*: Arc Length *B*, *C*: endpoints of arc *d*: diameter of the circle *m*: the measure of
Area of Sector	$A = \frac{m\overset{\frown}{BC}}{360^\circ}\pi r^2$	*A*: Area of Sector *B*, *C*: endpoints of intercepted arc *r*: radius of the circle *m*: the measure of
Cylinder	$SA = 2\pi r^2 + 2\pi rh$	*SA*: Surface Area *r*: radius of the base *h*: height
	$V = \pi r^2 h$	*V*: Volume *r*: radius of the base *h*: height
Cone	$SA = \pi r^2 + \pi rl$	*SA*: Surface Area *r*: radius of the base *l*: slant height
	$V = \frac{1}{3}Bh$ **or** $V = \frac{1}{3}\pi r^2 h$	*V*: Volume *r*: radius of the base *h*: height *B*: area of the base
Prism	$V = Bh$	*V*: Volume *B*: area of base *H*: height
	$SA = 2B + Ph$ **or** $SA = 2B + L$	*SA*: Surface Area *B*: area of base *P*: Perimeter of the base *h*: height *L*: lateral surface area
Pyramid	$V = \frac{1}{3}Bh$	*V*: Volume *B*: area of the base *h*: height
Quadratic Formula	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$	*x*: solution a, b, c: coefficients
Sphere	$V = \frac{4}{3}\pi r^3$	*V:* Volume *r*: radius
	$SA = 4\pi r^2$	*SA*: Surface Area *r*: radius

Mathematics Formula Sheets for End-of-Course Exams (continued)

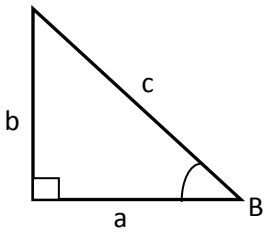
Use at least two decimal place values when approximating square roots or trigonometric ratios.

Special Right Triangles





Trigonometric Ratios



$\sin B = \frac{b}{c}$

$\cos B = \frac{a}{c}$

$\tan B = \frac{b}{a}$

Sample Items for Classroom Use

The need to build a robust item bank with items that assess the new mathematics standards prevents the release of actual test items that have been used operationally for the current mathematics standards. In this document are three sources of sample items available for classroom use: (1) New samples for 2011, (2) An alignment of Released Items and Practice Tests to the current performance expectations, and (3) Sample items provided in the *Changes for 2010 and Beyond* document that are still pertinent. Items on the EOC exams and on the EOC makeup exams will consist of multiple-choice, completion, and short-answer items.

Item Types on End-of-Course and EOC Makeup Exams

	Multiple-Choice	Completion	Short-Answer
Point Value	**1**	**1**	**2**
Distinguishing Feature(s)	• Each Multiple-Choice item has four answer choices, the correct answer and three distractors.	• Each Completion item requires the student to enter a numerical answer, an expression with variables, or an equation with variables.	• Each Short-Answer item requires a constructed response. • A Short-Answer item may ask the student to write a sentence or equation; complete a table, graph, or chart; draw a picture; construct a diagram; or perform a calculation. • An Enhanced Multiple-Choice item will ask the student to select from a list of four answer choices and then show work to either explain the reason(s) for choosing that answer or to solve a problem.

New Samples for 2011

These items are samples that are aligned with the K-12 Mathematics Learning Standards. They have not gone through the comprehensive review process that test items must pass before placement on an actual state test. Teachers may still use these items as classroom exercises, or informal checks for understanding, as teachers have the ability and choice to clarify any questions about these items as students are working on them.

Algebra 1/Integrated Mathematics 1

Multiple-Choice Items

Sample item for Performance Expectation A1.6.C/M1.5.B

Due to budget constraints at a particular company, every employee receives a 2% decrease to their salary.

What impact does this salary decrease have on the mean and on the range of employee salaries at the company?

O **A.** The mean and range both decrease.

O **B.** The mean and range do not change.

O **C.** The mean does not change but the range decreases.

O **D.** The mean decreases but the range does not change.

Answer: A

Sample item for Performance Expectation A1.7.A/M1.7.A

Graph A is the graph of $y = 4(5)^x$ and graph B is the graph of $y = 5(4)^x$.

Which statement about the two graphs is true?

O **A.** Both graphs A and B rise at the same rate.

O **B.** Graph A rises at a faster rate than graph B.

O **C.** Graph B rises at a faster rate than graph A.

O **D.** The y-intercept of graph A is above the y-intercept of graph B.

Answer: B

Completion Items

Completion items may ask students to give a numeric answer or to write an equation or expression using variables.

Sample item for Performance Expectation A1.2.C/M1.7.C

Write the expression in simplest radical form.

$$\sqrt{\frac{18}{25}}$$

Write your answer on the line.

What is the simplest radical form of the expression? _____

Answer: $\frac{3\sqrt{2}}{5}$ or $\frac{3}{5}\sqrt{2}$

Sample item for Performance Expectation A1.2.C/M1.7.C

Simplify the expression.

$$\left(\frac{x^2}{x^{-3}}\right)^4$$

Express your answer using positive exponents.

Write your answer on the line.

What is the simplified expression? _____

Answer: x^{20}

Sample item for Performance Expectation A1.4.A/M1.3.A

The equation $13 - 2|x + 3| = 5$ has two real solutions.

Determine the negative solution of the equation.

Write your answer on the line.

What is the negative solution of the equation? _____

Answer: -7

Short-Answer Items

Sample item for Performance Expectation A1.1.A/M1.1.A

Joe gave away one dollar on day 1. Each day after that, he gave away twice as many dollars as he had given away on the previous day.

Let $f(n)$ represent the number of dollars given away on day n.

Which function models this situation?

O **A.** $f(n) = 2^n$

O **B.** $f(n) = 2^{n-1}$

O **C.** $f(n) = 2n - 1$

O **D.** $f(n) = (n - 1)^2$

Determine how much money Joe gave away on day 10.

How much money did Joe give away on day 10?

_____

Note: This is an example of an Enhanced Multiple-Choice item. Enhanced Multiple-Choice items will ask students to select from a list of four choices and then either explain the reason(s) for choosing that answer or show work to solve a problem. Enhanced Multiple-Choice items are scored as Short-Answer items.

2-point response: The student shows understanding of selecting an equation to model and solving a problem by doing the following:

- Selects B
- Writes $512

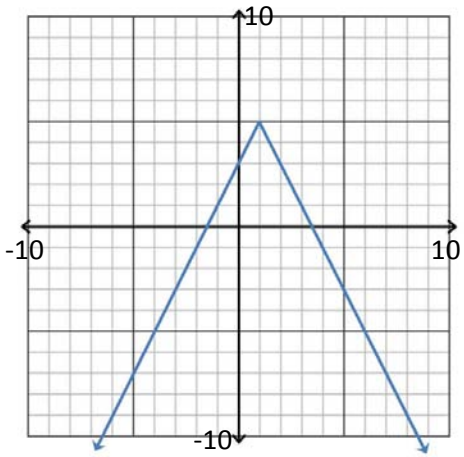
1-point response: The student does one of the following:

- Selects B
- Writes $512
- Selects a different option than B and solves for n=10

Sample item for Performance Expectation A1.3.A/M1.2.A

An absolute value function is given.

$$f(x) = -2|x-1|+5$$



Determine the domain and range of this function.

What is the domain of this function?

_____

What is the range of this function?

_____

Note: Items asking students to identify domain and/or range may provide an equation, a graph, or both. Consult Item Specifications for function types allowed in items assessing A1.3.A/M1.2.A.

2-point response: The student shows understanding of determining the domain and range of a function by doing the following:

- Writes the domain is all real numbers, or equivalent
- Writes the range is all real numbers less than or equal to 5, or equivalent

Students can earn 1 point by doing one of the above.

Sample Answers:

Domain: "all real numbers"

$x \in R$

$(-\infty, \infty)$

Range: "all real numbers less than or equal to 5"

$y \leq 5$

$(-\infty, 5]$

$\{y | y \leq 5\}$

Note: Students may present the domain and range in words or symbolically using inequalities, interval notation or set notation.

Geometry/Integrated Mathematics 2

Multiple-Choice Items assessing Geometric Constructions

Note: PEs G.2.C/M1.4.G and G.3.I/M3.7.C will be assessed on the Geometry/Integrated Mathematics 2 End-of-Course and EOC Makeup Year 2 using multiple-choice items (see Item Specifications). This list of constructions describes geometric constructions students are expected to know, recognize and perform. Students should be able to identify visual representations of each construction. This list will not be provided during the test.

For G.2.C/M1.4.G: *Explain and* **perform basic compass and straightedge constructions related to parallel and perpendicular lines.**

- Construct a line parallel to a given line through a point not on the given line.
- Construct a line perpendicular to a given line through a point on the given line.
- Construct a line perpendicular to a given line through a point not on the given line.
- Construct a line perpendicular to a given ray through the endpoint of the ray.
- Construct a perpendicular bisector of a line segment.

Note: Items assessing G.2.C/M1.4.G will be multiple-choice items that may ask students to identify visuals representing the steps used in constructions related to parallel and perpendicular lines. Please see Item Specifications for more information.

Note: Items assessing G.2.C/M1.4.G will appear on Geometry End-of-Course and Integrated Mathematics 1 End-of-Course. Please see End-of-Course Crosswalks for more information.

For G.3.I/M3.7.C: *Explain* **and perform constructions related to the circle.**

- Construct the circumscribed circle for a given triangle.
- Construct the inscribed circle for a given triangle.
- Construct a diameter of a given circle.
- Locate the center of a given circle.
- Construct a line tangent to a given circle through a given point on the circle.
- Construct lines tangent to a given circle through a given point outside the circle.

Note: Items assessing G.3.I/M3.7.C will be multiple-choice items that may ask students to identify visuals representing the steps used in constructions related to the circle. Please see Item Specifications for more information.

Note: Items assessing G.3.I/M3.7.C will appear on Geometry End-of-Course. Please see the Geometry End-of-Course Crosswalk for more information.

Other Multiple-Choice Items

Sample item for Performance Expectation G.1.D/M2.3.C

Determine the converse of the given statement.

If the table top is rectangular, then its diagonals are congruent.

Which is the converse of this statement?

O **A**. If a table top is rectangular, then its diagonals are not congruent.

O **B.** If the diagonals of a table top are congruent, then it is rectangular.

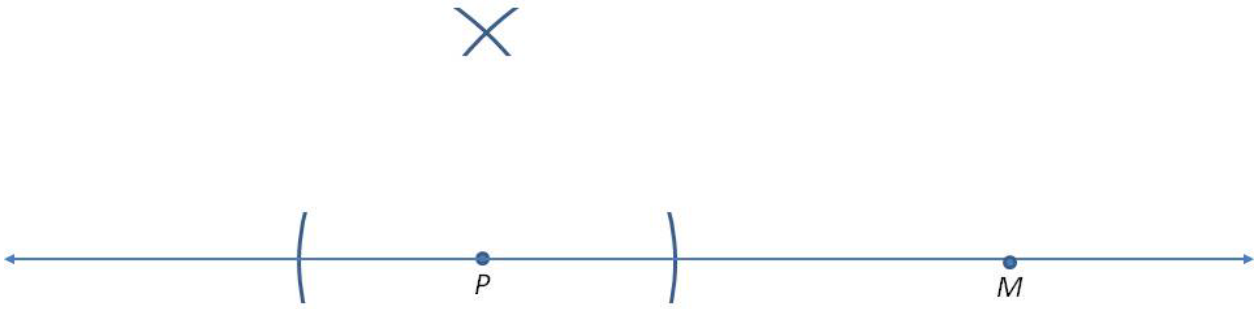
O **C**. If a table top is not rectangular, then its diagonals are not congruent.

O **D**. If the diagonals of a table top are not congruent, then it is not rectangular.

Answer: B

Sample item for Performance Expectation G.2.C/M1.4.G

Given line *PM*, the drawing shows the beginning steps of a geometric construction.



Which construction is shown?

O **A.** The perpendicular bisector of line *PM*.

O **B.** A line perpendicular to line *PM* at point *P*.

O **C.** A line perpendicular to line *PM* at point *M*.

O **D.** A line parallel to line *PM* through point *P*.

Answer: B

Sample item for Performance Expectation G.3.I/M3.7.C

Which construction represents the center of a circle that is inscribed in a triangle?

O **A.** The intersection of the three altitudes of the triangle.

O **B.** The intersection of the three medians of the triangle.

O **C.** The intersection of the angle bisectors of each angle of the triangle.

O **D.** The intersection of the perpendicular bisectors of each side of the triangle.

Answer: C

Sample item for Performance Expectation G.6.F/M2.5.C

There are 5 horses on 12 acres of land.

1 acre = 43,560 square feet

What is the mean number of square **yards** per horse?

O **A.** 8,712 square yards

O **B.** 11,616 square yards

O **C.** 34,848 square yards

O **D.** 104,544 square yards

Answer: B

Sample item for Performance Expectation G.6.F/M2.5.C

A backpack has a volume of 3000 cubic inches.

1 inch = 2.54 centimeters

What is the volume of the backpack to the nearest cubic centimeter?

O **A.** 183 cubic centimeters

O **B.** 1,181 cubic centimeters

O **C.** 7,620 cubic centimeters

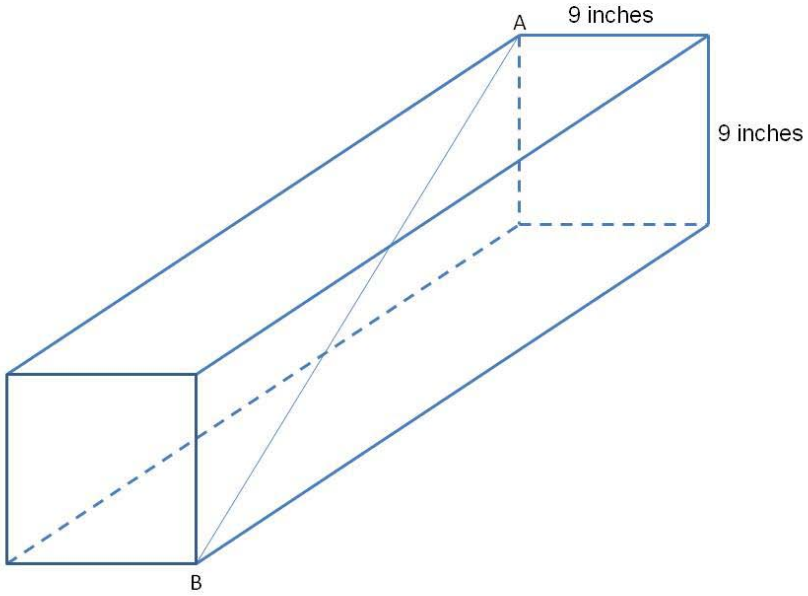
O **D.** 49,161 cubic centimeters

Answer: D

Completion Items

Sample item for Performance Expectation G.3.D/M2.3.G

A rectangular prism is shown. The base of the prism is a square. The length of the diagonal from top corner A to opposite bottom corner B is 2 feet.



Determine the exact length of the box in inches.

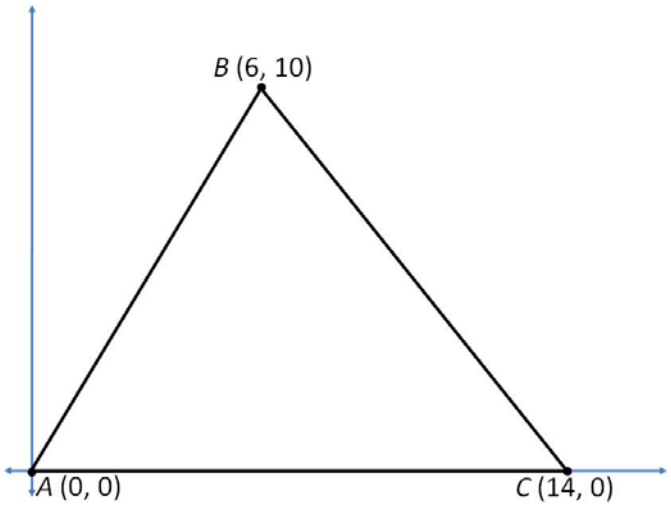
Write your answer on the line.

What is the exact length of the box? _____inches

Answer: $\sqrt{414}$ or $3\sqrt{46}$

Sample item for Performance Expectation G.4.A/M1.3.H

In ΔABC, point A is located at the origin.



Determine an equation or the line that passes through point B and the midpoint of $\overline{AC}$.

Write your answer on the line.

What is an equation for the line that passes through point B and the midpoint of $\overline{AC}$? _____

Note: This completion item requires students to find an equation of a line.

Sample answers: $y = -10x + 70$, $y = -10(x - 7)$, $y - 10 = -10(x - 6)$

Sample item for Performance Expectation G.4.B/M2.3.L

Points X, Y and Z are collinear. Y is the midpoint of $\overline{XZ}$.

The coordinates of point X are (-4, 5). The coordinates of point Z are (8, -3).

Determine the coordinates of point Y.

Write your answer on the line.

What are the coordinates of point *Y*? (_____ , _____)

Answer: (2, 1)

Sample item for Performance Expectation G.6.F/M2.5.C

Mrs. Norris is painting the walls of her dining room with a surface area of 290,304 square inches. One gallon of paint covers 375 square feet.

Determine the number of gallons needed for Mrs. Norris to apply two coats of paint.

Write your answer on the line.

How many gallons will Mrs. Norris need to apply two coats of paint?

_____ gallons

Answer: 11

Sample item for Performance Expectation G.6.F/M2.5.C

A box has a volume of 4 cubic feet.

Determine the volume of the box in cubic inches.

Write your answer on the line.

What is the volume of the box in cubic inches? _____ cubic inches

Answer: 6912

Short-Answer Items assessing Geometric Proofs

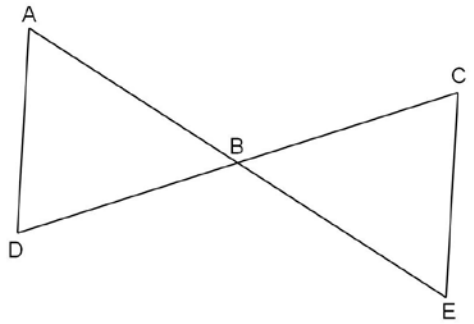
Sample item for Performance Expectation G.3.B/M2.3.F

A proof is shown.

Fill in the blanks for steps 5 and 6 to complete the proof.

Given: B is the midpoint of $\overline{AE}$.
B is the midpoint of $\overline{CD}$.

Prove: $\Delta ABD \cong \Delta EBC$



Statements	Reasons
1. B is the midpoint of $\overline{AE}$.	1. Given
2. $\overline{AB} \cong \overline{BE}$	2. Definition of midpoint
3. B is the midpoint of $\overline{CD}$.	3. Given
4. $\overline{CB} \cong \overline{BD}$	4. Definition of midpoint
5.	5. Vertical Angles Theorem
6. $\Delta ABD \cong \Delta EBC$	6.

2-point response: The student shows understanding of proving triangle congruence by doing the following:

- Writes $\angle ABD \cong \angle EBC$, or equivalent, for statement 5
- Writes Side-Angle-Side, or equivalent for reason 6

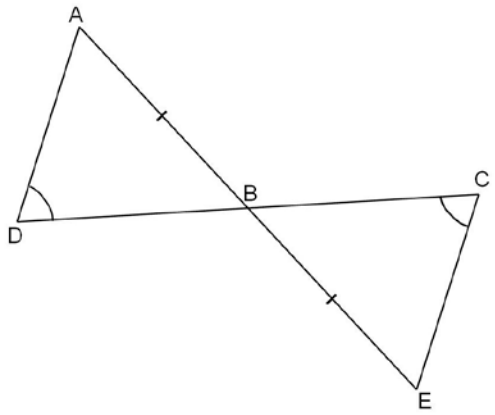
Students can earn 1 point by doing one of the above.

Sample item for performance expectation G.3.B/M2.3.F

In the diagram:

— $\overline{AB} \cong \overline{EB}$

— $\angle ADB \cong \angle ECB$



Prove $\Delta ABD \cong \Delta EBC$ using mathematical language and concepts.

Proof:

2-point response: The student shows understanding of proving triangle congruence by doing the following:

- Writes $\overline{AB} \cong \overline{EB}$ and $\angle ADB \cong \angle ECB$ (given)
- Writes $\angle ABD \cong \angle CBE$ by vertical angles, or equivalent
- Writes $\Delta ABD \cong \Delta EBC$ by Angle-Angle-Side, or equivalent

1-point response: The student does one of the following:

- Writes $\angle ABD \cong \angle CBE$ by vertical angles, or equivalent
- Writes $\Delta ABD \cong \Delta EBC$ by Angle-Angle-Side, or equivalent

Note: Student responses may be in the form of a flow chart proof, two-column proof, or paragraph proof. Student responses should refer to the given information.

Sample Answers:

Proof:	$\overline{AB} \cong \overline{CD}$	Given
	$\angle ADB \cong \angle ECB$	Given
	$\angle ABD \cong \angle CBE$	Vertical Angles
	$\Delta ABD \cong \Delta EBC$	AAS Congruence

Proof: $\overline{AB} \cong \overline{CD}$ and $\angle ADB \cong \angle ECB$ are given. $\angle ABD \cong \angle CBE$ and $\angle ABD \cong \angle CBE$ are congruent because vertical angles are congruent. Therefore, $\Delta ABD \cong \Delta EBC$ by Angle-Angle-Side Congruence.

Other Short-Answer Items

Sample item for Performance Expectation G.1.D/M2.3.C

The given statement is a valid geometric proposition.

If the table top is rectangular, then its diagonals are congruent.

Write the inverse of the given statement.

Write the contrapositive of the given statement.

2-point response: The student shows understanding of writing the inverse and contrapositive of a valid proposition by doing the following:

- Writes If a table top is not rectangular, then its diagonals are not congruent, or equivalent, for the inverse
- Writes If the diagonals of a table top are not congruent, then it is not rectangular, or equivalent, for the contrapositive.

1-point response: The student does one of the following:

- Writes If a table top is not rectangular, then its diagonals are not congruent, or equivalent, for the inverse
- Writes If the diagonals of a table top are not congruent, then it is not rectangular, or equivalent, for the contrapositive
- Writes the inverse as the contrapositive and the contrapositive as the inverse.

Alignment of Released Items to Current Performance Expectations

OSPI has released items that appeared on previous tests (formerly the WASL). While the WASL has been replaced by the Measurements of Student Progress (MSP) and the End-of-Course (EOC) Exams, the WASL released items remain a valuable resource. Some of the released items align to the new K-12 mathematics standards and can be used in the classroom as they appeared on the WASL.

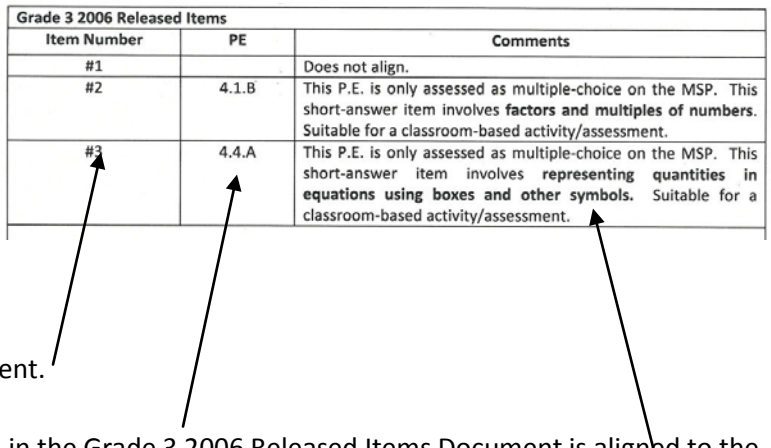
Some of the Released Items are only partially aligned to the new K-12 mathematics standards and can be used in the classroom with minor modifications or considerations. These considerations are described below.

(1) It is standard practice on our state assessments to write test questions with vocabulary targeted to the previous grade level or lower readability, except for required mathematics terms. As an example, third grade test questions are written at a second grade readability level. Some of the released items written for a standard in a particular grade on the WASL are the same standard assessed at a lower course level on the MSP or EOC. If a WASL released item has moved down a grade level, the vocabulary in the item may be above the targeted readability level. Because teachers can choose to read items to students during classroom-based activities and/or assessments, this should not be a problem.

(2) Previous WASL items were written in the following formats: multiple-choice, short-answer, and extended response. MSP and EOC items are written in the following formats: multiple-choice, completion, and short-answer. Classroom-based activities and assessments are not limited to the formats of either assessment. The differences in item format will be noted in the comments section of the alignment table. Multiple-choice items have three options in grades 3-5 and four options in grades 6-High School EOC. If a Released Item has changed grade levels which would cause a difference in the number of options, it will also be noted under comments in the alignment table. Teachers can choose to give students experience with items of a different number of options or choose to add or eliminate an answer choice.

The alignment of the previously used Released Items and Practice Test items are organized by document grade level and year. When there is an alignment of the item to a current performance expectation (PE), the PE will be listed in the second column. The "Comments" column will describe the alignment, if any, and note any considerations such as difference in item format, or suggestions to increase rigor to meet current standards.

The following is a brief description of how to read the Alignment Tables:



Grade 3 2006 Released Items		
Item Number	**PE**	**Comments**
#1		Does not align.
#2	4.1.B	This P.E. is only assessed as multiple-choice on the MSP. This short-answer item involves **factors and multiples of numbers**. Suitable for a classroom-based activity/assessment.
#3	4.4.A	This P.E. is only assessed as multiple-choice on the MSP. This short-answer item involves **representing quantities in equations using boxes and other symbols.** Suitable for a classroom-based activity/assessment.

Shows item number in the document.

In this case, indicates that Item #3 in the Grade 3 2006 Released Items Document is aligned to the performance expectation 4.4.A in the new mathematics standards.

In this case, the comment explains that this PE on the MSP is only assessed as a multiple-choice item. Although this released item is in a short-answer format, teachers can choose to use this item in the classroom because it deals with **representing quantities in equations using boxes and other symbols,** a current performance expectation.

Alignment Tables

Comments provide a written description of the performance expectation assessed in the released item **in bold**. Released items are located at: http://www.k12.wa.us/Mathematics/ReleasedItems.aspx.

When applicable, comments will explain partial alignment, any possible changes needed to the item for complete alignment, changes in item format needed, suitability of item as a classroom activity or classroom-based assessment rather than as an example of an item that will be on the Measurements of Student Progress (MSP), etc.

Released items that are italicized are not aligned to the new mathematics performance expectations. The items are described for teachers' convenience for possible classroom enrichment.

Year 1 Quick Guide

2006 High School Practice Test	
Item Number	**PE**
8	A1.5.A/M2.2.A
10	A1.3.B/M1.2.B
12	A1.1.A/M1.1.A
25	A1.2.E/M2.5.A
27	A1.1.B/M1.1.B
30	A1.8.B(A1.7.D)/ M1.8.B(M1.6.D)
33	A1.3.B/M1.2.B
34	A1.8.B(A1.1.D)/ M2.6.B(M2.1.C)
2007 High School Released Items	
Item Number	**PE**
8	A1.6.D/M1.3.F
9	A1.1.A/M1.1.A
10	A1.8.E(A1.1.B)/ M1.8.E(M1.1.B)
14	A1.3.C/M1.1.C
18	A1.1.C/M1.1.C
19	A1.1.B/M1.1.B
2008 High School Released Items	
Item Numbers	**PE**
6	A1.1.C/M1.1.C
10	A1.8.E(A1.6.B)/ M1.8.E(M1.5.C)

Year 2 Quick Guide

2006 High School Practice Test	
Item Number	**PE**
5	M2.4.A/A2.6.A
8	A1.5.A/M2.2.A
9	G.6.C/M3.5.D
18	M2.6.B(M2.4.A)/ A2.8.A(A2.6.A)
20	G.3.A/M2.3.E
23	G.3.F/M2.3.J
24	G.6.D/M3.5.D
25	A1.2.E/M2.5.A
34	A1.8.B(A1.1.D)/ M2.6.B(M2.1.C)
2007 High School Released Items	
Item Numbers	**PE**
5	G.3.A/M2.3.E
6	G.5.B/M3.2.B
12	G.6.C/M3.5.D
16	G.5.C/M3.2.C

Alignment Tables

2006 High School Practice Test		
Item Number	**PE**	**Comments**
1	8.5.C(8.2.E)	Cognitive complexity may not be high enough to fit this PE. This item assesses **solving problems involving recalling perfect squares from 1 to 100.**
2	7.2.C	This item assesses **solving problems involving similar figures.**
3	8.2.D	This item does not include a coordinate plane. This item assesses **the effect of one or more rotations.**
4	6.3.D	This item assesses **solving multi-step word problems involving rates.**
5	M2.4.A/A2.6.A	This item assesses **applying the fundamental counting principle to calculate probabilities in situations arising from two-stage experiments.** Assessed as strength/weakness on Integrated Mathematics 2 EOC.
6	6.2.A	This item assesses **writing an equation with variables to represent information in a table.**

2006 High School Practice Test *continued…*		
Item Number	**PE**	**Comments**
7	Partially aligned to 7.5.A	This item assesses **determining the coordinates of a given point in the coordinate plane.** The student also needs to use the relation between the x- and y-value of the point.
8	A1.1.D/M2.1.C	This item assesses **solving problems that can be represented by a quadratic function.** Assessed as strength/weakness on Algebra 1 EOC and Integrated Mathematics 2 EOC. Use as a completion item worth 1 point.
9	G.6.C/M3.5.D	This item assesses **applying formulas for volume of three-dimensional figures to solve problems.** Assessed as strength/weakness on Geometry EOC.
10	A1.3.B/M1.2.B	This item assesses **representing a function as a graph.** Assessed on Algebra 1/Integrated Mathematics 1 EOC and EOC Makeup Year 1.
11	8.5.C(8.3.F)	This item assesses **solving problems involving probabilities of independent events.**
12	A1.1.A/M1.1.A	This item assesses **selecting equations to model problems.** Assessed on Algebra 1/Integrated Mathematics 1 EOC and EOC Makeup Year 1.
13	7.6.C(7.3.D)	This PE is only assessed with short-answer or multiple-choice on the MSP. This extended-response item assesses **solving problems involving surface area and volume.** This item is suitable for a classroom-based exercise.
14	7.4.B	This item assesses **determining the theoretical probability of a particular event.** Students will also need to determine areas of rectangles.
15	8.2.A,C	This item assesses **identifying angles as supplementary** and *demonstrating that the sum of the angles in a triangle is 180 degrees*.
16	G.6.F/M2.5.C	This item assesses **solving problems involving measurement conversions within systems.** Assessed on Geometry/Integrated Mathematics 2 EOC and EOC Makeup Year 2.
17	4.5.E(4.4.B)	This PE is only assessed with short-answer or multiple-choice on the MSP. This extended-response item assesses **solving problems involving unit conversions, including time,** and **elapsed time.** This item is suitable for a classroom-based exercise.
18	M2.6.B(M2.4.A)/ A2.8.A(A2.6.A)	This item assesses **applying the fundamental counting principle to calculate probabilities in situations arising from compound events.** Assessed as strength/weakness on Integrated Mathematics 2 EOC.
19	8.2.D	This item assesses **the effect of one reflection.**

2006 High School Practice Test *continued…*		
Item Number	**PE**	**Comments**
20	G.3.A/M2.3.E	This item assesses **knowing and applying basic postulates and theorems about triangles.** This is an example of a 2-point Short-Answer item assessing these PEs on Geometry/Integrated Mathematics 2 EOC and EOC Makeup Year 2.
21	7.1.A	This item assesses **comparing and ordering rational numbers.**
22	6.4.E	This item assesses **determining the volume of rectangular prisms.**
23	G.3.F/M2.3.J	This item assesses **knowing and applying basic theorems about parallelograms.** Assessed on Geometry/Integrated Mathematics 2 EOC and EOC Makeup Year 2.
24	G.6.D/M3.5.D	This item assesses **verifying the effect that changing two linear dimensions has on perimeter and area.** Assessed as strength/weakness on Geometry EOC using multiple-choice or completion items worth 1 point. Suggested edit to item: Ask only one question.
25	A1.2.E/M2.5.A	This item assesses **using algebraic properties to factor polynomials.** Assessed as strength/weakness on Algebra 1 EOC and Integrated Mathematics 2 EOC.
26	8.2.D	This item assesses **the effect of one translation.**
27	A1.1.B/M1.1.B	This item assesses **solving problems that can be represented by linear functions.** Assessed on Algebra 1/Integrated Mathematics 1 EOC and EOC Makeup Year 1.
28	6.1.H	This item assesses **solving multi-step word problems involving operations with decimals and verifying the answer.**
29	8.5.G(8.4.A)	Cognitive complexity may not be high enough to fit this PE.
30	A1.8.B(A1.1.C)/ M1.8.B(M1.1.C) *Partially aligned*	This item assesses **applies strategies to solve problems that can be presented by a system of two linear equations.** However, this problem involves two equations with three variables.These PEs are assessed on Algebra 1/Integrated Mathematics 1 EOC and EOC Makeup Year 1.
31	*Not aligned*	*This item requires students to draw conclusions from a diagram.*
32	4.4.E	This item assesses **determining the median of a set of data.**
33	A1.3.B/M1.2.B	This item assesses **representing a function with a symbolic expression or as a graph, and making connections among these representations.** Assessed on Algebra 1/Integrated Mathematics 1 EOC and EOC Makeup Year 1.
34	A1.1.D/M2.1.C	This item assesses **solving problems that can be represented by quadratic functions and equations.** The content aligns with PEs A1.1.D/M2.1.C; however, these PEs on the Algebra 1 EOC and Integrated Mathematics 1 EOC will be assessed using multiple-choice or completion items worth one point. This item is suitable for classroom-based activity/assessment.

2006 High School Practice Test *continued…*		
Item Number	**PE**	**Comments**
35	8.4.C	This PE is only assessed with multiple-choice or completion on the MSP. This item assesses **evaluating numerical expressions involving non-negative integer exponents.**
36	7.3.A	This item assesses **determining the volume of cylinders.**
37	5.6.E(5.3.F)	This item assesses **solving problems involving areas of triangles.**
38	7.6.G(7.4.D)	This PE is only assessed with short-answer on the MSP. This item assesses **extracting information from graphs to construct circle graphs.**
39	*Not aligned*	*This item requires students to describe data in a bar graph.*
40	6.6.C(6.3.D)	This item assesses **solve problems involving percents.**
41	8.3.F	This item assesses **determining probabilities for mutually exclusive events.**
42	8.3.F	This item assesses **determining probabilities for independent events.**
2007 High School Released Items		
Item Number	**PE**	**Comments**
1	8.4.A	This item assesses **translating numbers written in scientific notation into standard form.**
2	8.5.C(8.3.G)	This item assesses **solving problems involving counting techniques and Venn diagrams.**
3	8.4.B	This item assesses **solving problems involving operations with numbers in scientific notation.**
4	7.2.G	This item assesses **determining the unit rate in a proportional relationship.**
5	G.3.A/M2.3.E	This item assesses **knowing and applying basic postulates and theorems about triangles.** Assessed on Geometry/Integrated Mathematics 2 EOC and EOC Makeup Year 2.
6	G.5.B/M3.2.B	This item assesses **applying properties of transformations.** Assessed as strength/weakness on Geometry EOC.
7	8.3.F	This item assesses **determining probabilities for independent events.**
8	A1.6.D/M1.3.F	This item assesses **finding the equation of a linear function that fits bivariate data.** Assessed on Algebra 1/Integrated Mathematics 1 EOC and EOC Makeup Year 1. Suggested edit to item: Change question to "Which equation represents a line that fits the data?"
9	A1.1.A/M1.1.A	This item assesses **selecting functions and equations to model problems.** Assessed on Algebra 1/Integrated Mathematics 1 EOC and EOC Makeup Year 1.
10	A1.1.A/M1.1.A	This item assesses **selecting functions and equations to model and solve problems.** Assessed on Algebra 1/Integrated Mathematics 1 EOC and EOC Makeup Year 1.

2007 High School Released Items *continued…*		
Item Number	**PE**	**Comments**
11	6.6.B(6.3.D)	This item assesses **identifying extraneous information related to solving multi-step word problems involving ratios.**
12	G.6.C/M3.5.D	This item assesses **applying formulas for volume of three-dimensional figures to solve problems.** Problems assessing these PEs on the Geometry EOC will be either multiple-choice or completion worth 1 point.
13	8.5.C(8.2.E)	Cognitive complexity may not be high enough to fit this PE.
14	A1.8.B(A1.3.C)/ M1.8.B(M1.2.C)	This item assesses **selecting and applying strategies to solve problems that involve solving for x in the equation f(x)=*b*.** Problems assessing these PEs on the Algebra 1/Integrated Mathematics 1 EOC and EOC Makeup Year 1 will not have a context and will be either multiple-choice or completion worth 1 point. Students should be familiar with the following terms: inversely proportional, varies inversely, inverse variation.
15	6.6.C(6.4.E)	This item assesses **solving problems involving surface area of rectangular prisms.**
16	G.5.C/M3.2.C	This item assesses **describing a composition of translations and reflections that superimposes one figure on the other given two congruent figures in a coordinate plane.** Content of this item aligns; however these PEs are assessed as strength/weakness using only multiple-choice items on Geometry EOC.
17	*Partially aligned*	This item could be edited to align with A1.6.B/M1.5.C by asking students to make valid inferences or draw conclusions based on the data or with A1.6.D/M1.3.F by asking students to find an equation that fits the data.
18	A1.1.C/M1.1.C	This item assesses **solving problems that can be represented by a system of two linear equations.** Assessed on Algebra 1/Integrated Mathematics 1 EOC and EOC Makeup Year 1.
19	A1.1.B/M1.1.B	This item assesses **solving problems that can be represented by linear equations.** Assessed on Algebra 1/Integrated Mathematics 1 EOC and EOC Makeup Year 1.
20	*Not aligned*	This item includes elements that align with G.6.C/M3.5.D (determine volume of sand) but the majority of the content of this item is below Geometry/Integrated Mathematics 3 level.

2008 High School Released Items		
Item Number	**PE**	**Comments**
1	8.4.A	This item assesses **representing numbers in scientific notation.**
2	6.3.D	This item assesses **solving multi-step word problems involving rate.**
3	6.6.C(6.4.G)	This item assesses **solving problems involving surface area of rectangular prisms.**
4	8.2.D	This item assesses **the effect of one rotation.**
5	8.3.F	This item assesses **determining probabilities for dependent events.**
6	A1.1.C/M1.1.C	This item assesses **solving problems that can be represented by a system of two linear equations.** Content of this item aligns; however, these PEs on the Algebra 1/Integrated Mathematics 1 EOC and EOC Makeup Year 1 will be assessed using completion or short-answer. Suggested item edit: Change the question to "How many bags of popcorn were sold?" and change the item to completion.
7	6.3.D, 6.4.B	Items on the MSP will only assess PE within the same area of emphasis, i.e. 6.3.C and 6.3.D. This items assesses PE from two different areas of emphasis so would not be used as an MSP item. This item assesses **solving multi-step word problems involving percents** and **determining the area of composite figures that can be divided into triangles and rectangles.**
8	7.1.F	This item assesses **writing an equation that corresponds to a given problem situation.**
9	8.3.G	This item assesses **solving multi-step problems using counting techniques and verifying the answer.**
10	A1.8.E(A1.6.B)/ M1.8.E(M1.5.C)	This item assesses **reading and interpreting graphs to make valid inferences and draw conclusions based on data.** These PEs are assessed on Algebra 1/Integrated Mathematics 1 EOC and EOC Makeup Year 1. Suitable for classroom-based activity/assessment.

Sample Items from Changes for 2010 and Beyond

These sample items were available in the *Changes for 2010 and Beyond* document and are still appropriate for the labeled performance expectation. Some of the items have been edited from 2010 for clarity thanks to feedback from the field. If the sample item is a Released Item, the information has now been added to the sample item.

Algebra 1/Integrated Mathematics 1

Completion Items

Sample item for Performance Expectation A1.1.B/M1.1.B

Dorian is saving money to buy a bicycle. Currently he has saved $\frac{2}{3}$ of the money he needs to buy the bicycle. He earns $14.50 more mowing lawns and now has $\frac{4}{5}$ of the money he needs to buy the bicycle.

Determine the cost of the bicycle.

Write your answer on the line.

What is the cost of the bicycle? $_____

Answer: 108.75

Sample item for Performance Expectation A1.2.C/M1.7.C

The expression $\left(\frac{\left(x^3\right)^{-2}}{x^2 \cdot x^3}\right)^3$ simplifies to the form x^m, for all nonzero values of x.

Determine the value of m.

Write your answer on the line.

What is the value of m? _____

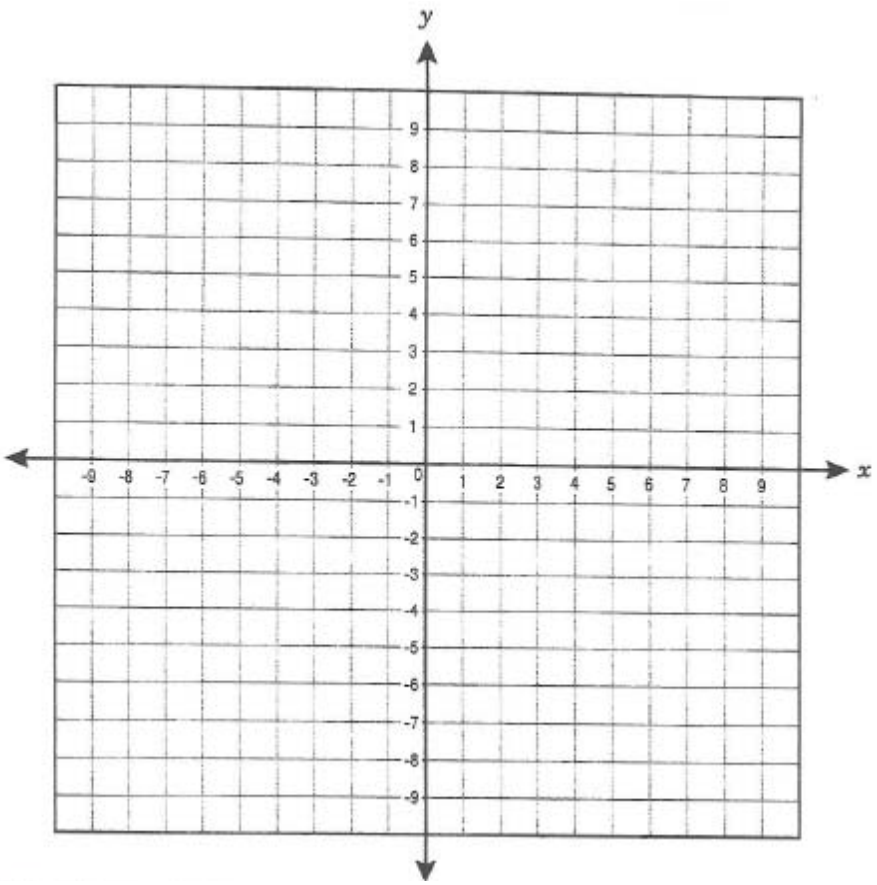
Answer: -33

Geometry/Integrated Mathematics 2

Completion Items

Sample item for Performance Expectation G.4.B/M2.3.L

Three vertices of a square have coordinates (3, 1), (4, -4) and (-1, -5). The diagonals of the square intersect at point Q.



Determine the coordinates of point Q.

You may use the blank grid to help determine the solution.

Write your answer on the line.

What are the coordinates of point Q? (_____ , _____)

Answer: (1, -2)

Sample item for Performance Expectation G.6.F/M2.5.C

Martina has a calculator box that has a volume of 29 cubic inches.

1 inch = 2.54 centimeters

Determine the volume of the calculator box to the nearest cubic centimeter.

Write your answer on the line.

What is the volume of the calculator box to the nearest cubic centimeter? _____

Answer: 475

The Common Core Standards Initiative

Washington is among the majority of states and territories — 48 states, two territories and the District of Columbia — that joined the Common Core Standards Initiative. As a member of this initiative, Washington State was able to review and provide comment on many drafts of the Common Core State Standards (CCSS) prior to their release on June 2, 2010.

In July 2010, with earlier authorization from the Washington State Legislature, Superintendent Dorn provisionally adopted the CCSS (E2SSB 6696). The next step in the process is to **submit a report to the Legislature** (January 2011) that includes a thorough comparison between Washington's learning standards and the Common Core State Standards, a proposed timeline for implementation — state and district level — and related costs. Superintendent Dorn will be able to adopt the new standards after the 2011 legislative session, unless directed otherwise by the Legislature.

Compare & Review with Washington State Standards

OSPI has convened a highly-qualified workgroup to review drafts of the standards and conduct a comprehensive comparison of the common core standards with Washington's current academic standards. The team comprises K-12 educators who are deeply familiar with our existing standards, state education associations and other K-12 sector stakeholders.

The workgroup will gather input and crosswalk our existing state standards with the common core standards for English language arts and mathematics. This analysis will make it possible to determine the support school districts will need as they implement the new standards.

Adoption & Implementation

Since state assessments will not change until the 2014-2015 school year, districts do not need to complete transition to common core standards until that time. Existing state standards will remain in effect until then. State assessments for the new standards will begin in the 2014-15 school year. A draft timeline for approval can be accessed online: http://www.k12.wa.us/corestandards/Timeline.aspx. Educators, families and the community can remain confident that existing state standards are academically strong and already aligned with national trends in K-12 education.

SMARTER Balanced Assessment Consortium

The 31-state SMARTER Balanced Assessment Consortium, or SBAC, was awarded a four-year $160 million Race to the Top assessment grant by the US Department of Education to develop a student assessment system aligned to a common core of academic standards. Washington is the applicant state for the consortium.

SBAC will create state-of-the-art adaptive online exams using "open source" technology. The online system will provide accurate assessment information to teachers and others on the progress of all students, including those with disabilities, English language learners and low- and high-performing students. The system will include:

1) the required summative exams (offered twice each school year);

2) optional formative, or benchmark, exams; and

3) a variety of tools, processes and practices that teachers may use in planning and implementing informal, ongoing assessment. This will assist teachers in understanding what students are and are not learning on a daily basis so they can adjust instruction accordingly.

SBAC's assessment system will be tied to the Common Core State Standards. By the end of 2011, states in the consortium must agree to adopt the Common Core State Standards in English language arts and mathematics. States still in the consortium in 2014-15 must agree to use the consortium's tests as their accountability assessments.

The SBAC tests will measure the full range of the common core standards in grades 3-8 and 11, including assessing problem solving and complex thinking skills. Teachers in participating states will be involved at all stages of item and test development, including writing, scoring and the design of reporting systems. Educators will also be able to access a reporting system that identifies each student's strengths, weakness and progress toward college and career readiness.

Access the entire press release at:
http://www.k12.wa.us/Communications/PressReleases2010/RTTTAssessmentGrant.aspx

Resources/Contact Information

Sign-up now for Movers and Shakers!

Receive pertinent mathematics assessment information and updates, meeting and workshop opportunities, and other mathematics notices on the Movers and Shakers email distribution list. To join, please send a request to felecia.mckinney@k12.wa.us.

Mathematics Assessment Webpage:
http://www.k12.wa.us/mathematics/

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