E 3A.1 (G 7)
Primary Target 3A (Content Domain NS), Secondary Target 1B (CCSS 6.NS.A), Tertiary Target 3G

When you divide 100 by a positive whole number, the result is always less than or equal to 100. This is not always true when you divide by a positive

3A.2

- The student is presented with one or more propositions or conjectures and several examples and asked

E 3A.2 (G 8)
Primary Target 3A (Content Domain NS), Secondary Target 1B (CCSS 7.NS.A), Tertiary Target 3G

Franco said that for any values a, b, and c the equation $a^2 + b^2 = c^2$ is always true. Mary disagrees.

Which of the following values for a, b, and c support Mary's claim? Select that apply.

A. $a = 6, b = 8, c = 10$
B. $a = 2, b = 4, c = 6$
C. $a = b = c = 0$
D. $a = 2, b = 2, c = 0$

: (1 point) The student selects all of the correct values that support Mary's claim (B, D).

: Multiple choice, multiple select response

3B: C , ,
.

G E 3B

- Items for this target should focus on the core mathematical work that students are doing around ratios and proportional relationships, the rational number system, and equations and expressions in grades 6-7 and equations, functions, and geometry in grade 8 with mathematical content from other domains playing a supporting role in setting up the reasoning contexts.
- Items for this target can probe a key mathematical structure such as that found in expressions and equations, ratios and proportional relationships, and the rational number system.
- Items for this target can require students to solve a multi-step, well-posed problem involving the application of mathematics to a real-world context. The difference between items for Claim 2A and Claim 3B is that the focus in 3B is on communicating the reasoning process in addition to getting the correct answer.
- Note that in grades 6-8, items provide less structure than items for earlier grades to focus on justifying or refuting a proposition or conjecture.
- Many machine-scorable items for these task models can be adapted to increase the autonomy of student's reasoning process but would require hand-scoring.
- Tasks have DOK Level 3, 4.

3B.1

- The student is presented with a proposition or conjecture. The student is asked to identify or construct reasoning that justifies or refutes the proposition or conjecture.
- Items in this task model often address more generalized reasoning about a class of problems or reasoning that generalizes beyond the given problem context even when it is presented in a particular case.

E 3B.1 (G 8)

3B.2

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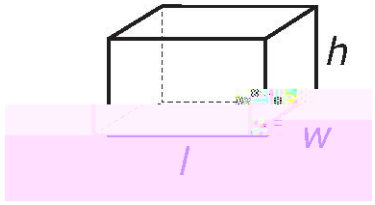

E 3B.2 (G 7)

E 3B.3 (G 7)
Primary Target 3B (Content Domain EE), Secondary Target 1D (7.EE.B), Tertiary Target 3C

In February, the price of a gallon of gasoline increased by 23% from the price in January. In March, the price decreased by 11% from the price in February. In March, gas cost $2.63 per gallon.

How much did a gallon of gasoline cost in January, in dollars? Round your answer to the nearest cent. Enter your answer in the response box.

Which equation shown can be solved to find x, the cost of gas in January?

A. $(0.11)(0.23)x = 2.63$
B. $(1.11)(1.23)x = 2.63$
C. $(0.89)(1.23)x = 2.63$
D. $(1.11)(0.77)x = 2.63$

: (2 points) The student enters the correct cost of a gallon of gas (2.40) and selects the correct equation (C).
(1 point) The student does one of these parts correctly.

: Equation/numeric and multiple choice, single correct response

: Current functionality doesn't allow for mixing equation/numeric and multiple choice, so in the meantime the first part could be made multiple choice.

E 3B.3 (G 8)

Primary Target 3B (Content Domain RP), Secondary Target 1A (CCSS 7.RP.A), Tertiary Target 4F

A car is traveling at a constant speed and drove 75 miles in 1.5 hours. One mile is approximately

E 3C.1 (G 7)
Primary Target 3C (Content Domain G), Secondary Target 1F (CCSS 7.G.B), Tertiary Target 3G

Glenn saw the figure below and said,
"If I find the length (*l*), width (*w*), and radius (*r*), then the area (*A*) of the shaded region is · – ^{2}."

Which assumptions must Glenn be making in order for his equation to give the correct area of the shaded region? Select that apply.

A. The quadrilateral is a rhombus.
B. The quadrilateral is a rectangle.
C. The curved figure in the center is a circle.
D. The curved figure in the center is a sphere.

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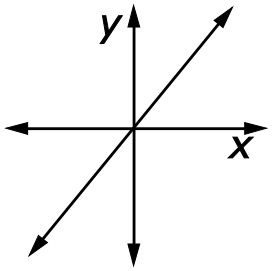
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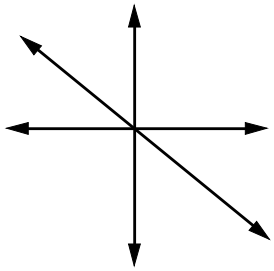

E 3D.2 (G 8)

Primary Target 3D (Content Domain EE), Secondary Target 1B (CCSS 8.EE.A), Tertiary Target 3C

Maggie claims that when you raise a whole number to a power, the result is always a greater number

3F: B

3F.1

- The student uses concrete referents to help justify or refute an argument.
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Grades 6-