

Explanation of Correct Response

Students must translate the description given in the problem and connect that to mathematical words and figures. Students who do this correctly will find that Jenna divided her circle into fourths.

Explanation of Correct Response

A student could receive full credit for the following sample response:

The student correctly calculated that $\$1200 - \60 is the cost of 19 desks at \$60 each, but incorrectly thinks that adding just \$1 to that total would be the cost of 19 desks at \$61 each. There are 19 desks, so the student should have added $\$1 \times 19$, which is \$19, to the cost of 19 desks at \$60 each in order to get the cost of 19 desks at \$61 each. The correct expression for the total is $\$1,200 - \$60 + \$1 \times 19$.

Explanation of Correct Response

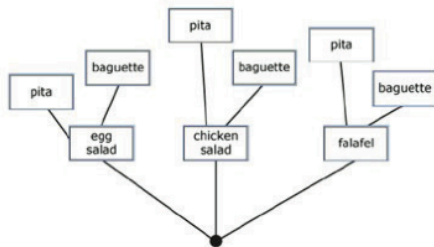
A student could receive full credit for the following sample response:

Let's say the length of a side of the square is x . Since a midpoint will divide a segment in half, $DE = EF = \frac{1}{2}x$. The formula for the area of a triangle is $A = \frac{1}{2}bh$, so the area of $\triangle DEF = \left(\frac{1}{2}\right)\left(\frac{1}{2}x\right)\left(\frac{1}{2}x\right) = \frac{1}{8}x^2$. The area of $ACEG$ is x^2 because it is a square. The student said the area of $\triangle DEF$ would be $\frac{1}{4}$ of the area of square $ACEG$. The correct answer is $\frac{1}{8}$ of the area of the square, so the student is wrong.

Explanation of Correct Response

To achieve a correct solution, "type of sandwich" boxes (i.e., falafel, egg salad, and chicken salad) should be moved to the three empty boxes closest to the point of origin of the tree diagram but can be placed in any order; then branching off the "type of sandwich" boxes would be the "type of bread" boxes (i.e., pita and baguette) in any order. There are 48 different correct response variations because the order within each type does not matter.

Sample Correct Response



In this selected-response question, the student needs to find the total distance that Ryan and Tomas walked by setting up an inequality with the variable x and solving. The solution then needs to be matched to the correct number line representation (CCSSM.7.EE.B.4).

Explanation of Correct Response

The correct response is the graph of the solution to the inequality $15 \leq (2.3 + 2x + 2.7 + 2x) \leq 21$, which is answer option A. This question assesses DOK level 3 skills on the Grade 7 test and is part of the Expressions and Equations reporting category within the Grade Level Progress reporting category. On the Grade 8 or Early High School tests, the question would assess DOK level 2 skills as part of the Foundation reporting category. Students produce an inequality to model the situation, and this question is part of the Modeling reporting category.