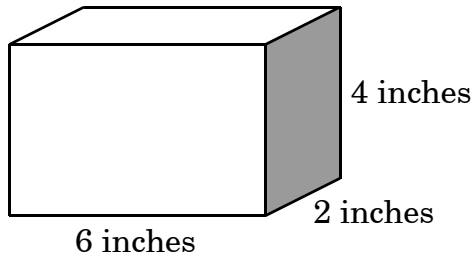
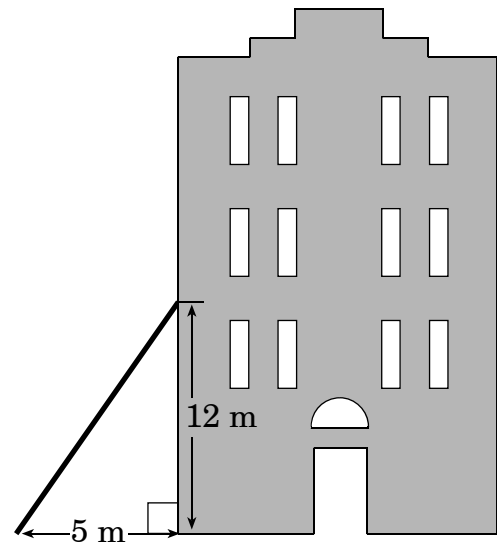


1. What is the maximum number of cubes with a side length of 2 inches that can fit in this box?



- A 48
B 24
C 12
D 6

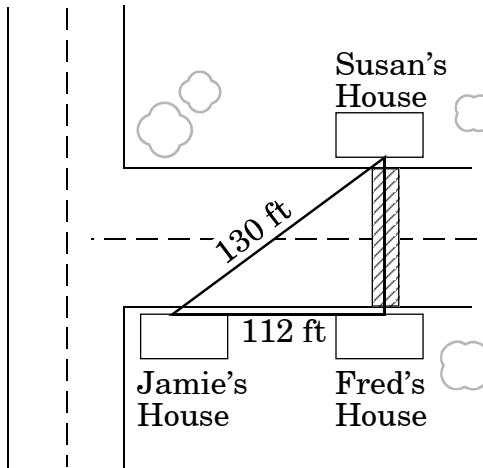
2. A ladder leans against the side of a building. The base of the ladder is 5 meters from the building, and the top is 12 meters above the ground.



What is the length of the ladder?

- A 11 meters
B 13 meters
C 17 meters
D 169 meters

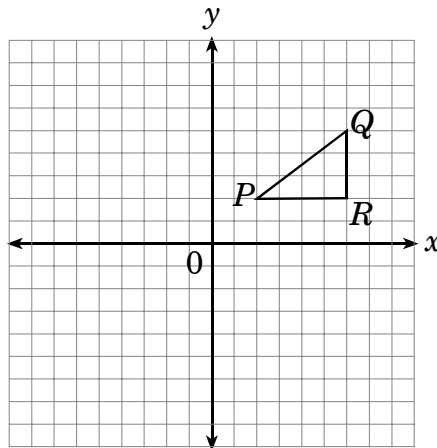
3. Jamie and Fred are meeting Susan at her house. Jamie must use the crosswalk in front of Fred's house to cross the street.



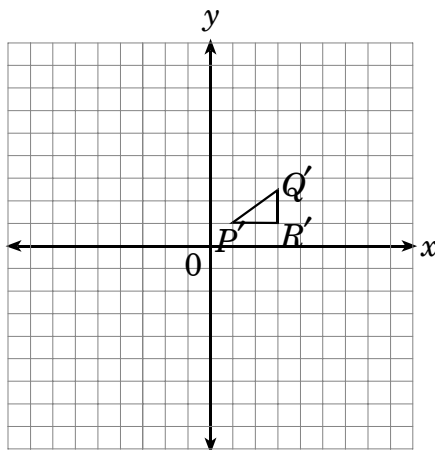
What is the total distance Jamie must walk?

- A 66 ft
- B 130 ft
- C 178 ft
- D 199 ft

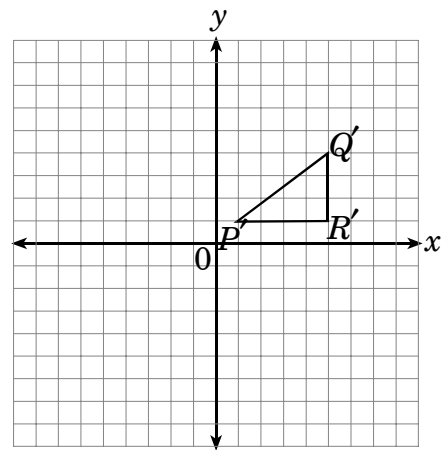
4. Which choice illustrates a dilation of $\triangle PQR$ with a scale factor of $\frac{1}{2}$?



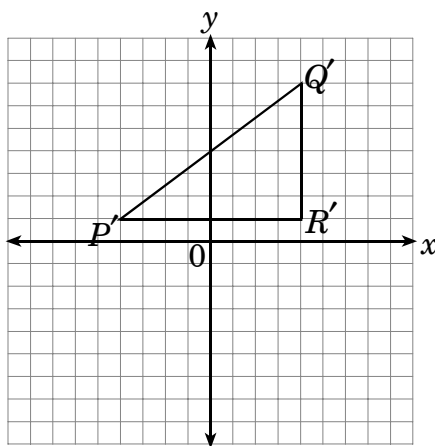
A



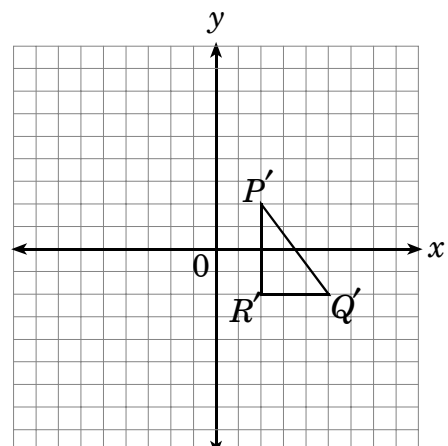
B



C



D



5. A triangle has the following vertices: $(-1, 1)$, $(6, -2)$, and $(3, 5)$. If the triangle undergoes a dilation with a scale factor of 3, what will be the vertices of the image?
- A $(-3, 3)$, $(18, -6)$, $(9, 15)$
- B $(3, 3)$, $(18, 6)$, $(9, 15)$
- C $(-3, 3)$, $(18, 6)$, $(9, 15)$
- D $(3, 3)$, $(18, -6)$, $(9, 15)$

End of Goal 3 Sample Items

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Answers to EOG Grade 8 Math Sample Items

Goal 3

1. Objective 3.01

Represent problem situations with geometric models.

Thinking Skill: Organizing **Correct Answer:** D

2. Objective 3.02

Apply geometric properties and relationships, including the Pythagorean theorem, to solve problems.

Thinking Skill: Applying **Correct Answer:** B

3. Objective 3.02

Apply geometric properties and relationships, including the Pythagorean theorem, to solve problems.

Thinking Skill: Applying **Correct Answer:** C

4. Objective 3.03

Identify, predict, and describe dilations in the coordinate plane.

Thinking Skill: Analyzing **Correct Answer:** A

5. Objective 3.03

Identify, predict, and describe dilations in the coordinate plane.

Thinking Skill: Generating **Correct Answer:** A