

Chapter 7 Practice Test (continued)

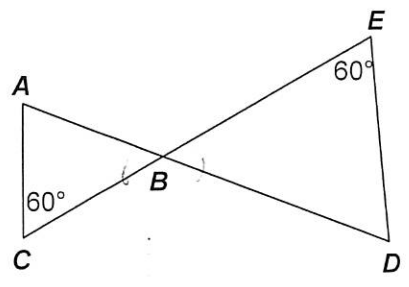
SCORE _____

6. The length of a rectangle is 18 centimeters and the width is 6 centimeters. A similar rectangle has a width of 2 centimeters. What is the length of the second rectangle?

$$\frac{3}{1} = \frac{18}{x} = \frac{x}{2}$$

6. x=6

7. Determine whether the triangles are similar. If so, write a similarity statement.

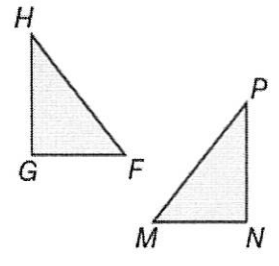


$\angle E \cong \angle A$
 $\angle ABC \cong \angle DBE$ Yes

Yes $\triangle ABC \sim \triangle DBE$

7. _____

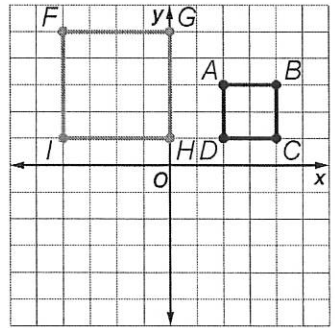
8. Determine if the two figures are congruent by using transformations. Explain your reasoning.



sample
 reflect across vertical line, translated

8. _____

9. Determine if the two figures are similar by using transformations. Explain your reasoning.

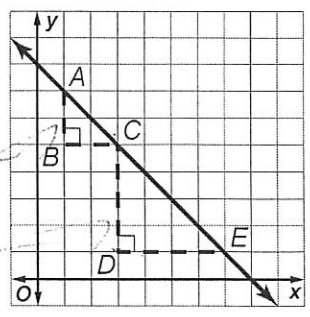


Translate left
 dilate by a scale factor of 2

9. _____

10. Write a proportion comparing the rise to the run for each of the similar slope triangles shown at the right. Then find the numeric value.

$$\frac{\text{rise}}{\text{run}} = \frac{3}{2} = \frac{4}{4}$$

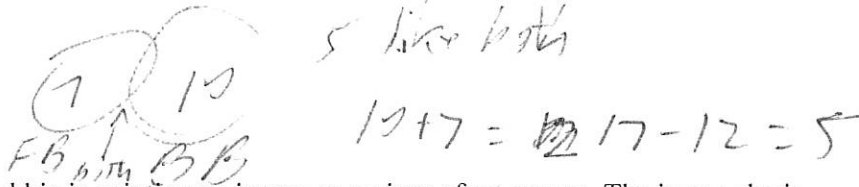


10. 1

Chapter 7 Practice Test

Write the letter for the correct answer in the blank at the right of each question.

1. A survey of 12 students showed that 7 liked football, 10 liked basketball, and 5 liked both. How many students just liked basketball?



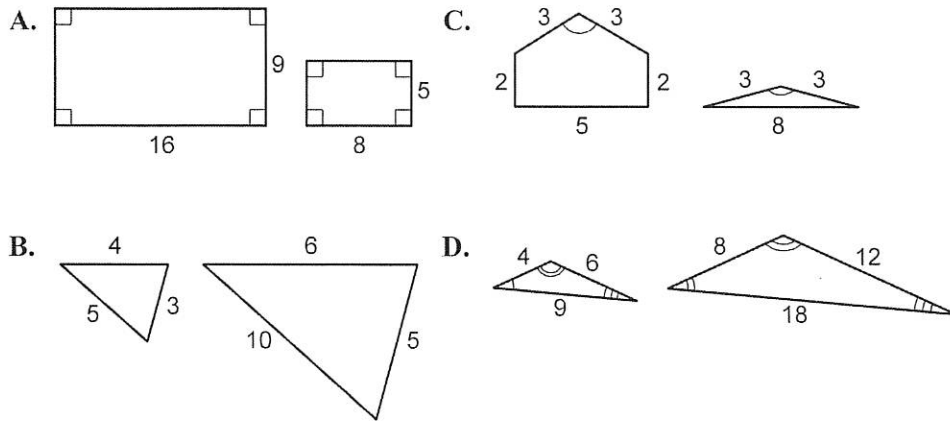
1. 5

2. Debbie is painting an image on a piece of art canvas. The image she is reproducing is 3 inches by 5 inches. She enlarges the dimensions 4 times. Which of the following statements is *not* true?

- F. The perimeter of the original image and the perimeter of the new image are related by a scale factor of 4.
- G. The area of the new image is 4 times the area of the original image.
- H. The area of the original image and the area of the new image are related by a scale factor of 16.
- I. The perimeter of the original image is $\frac{1}{4}$ the perimeter of the new image.

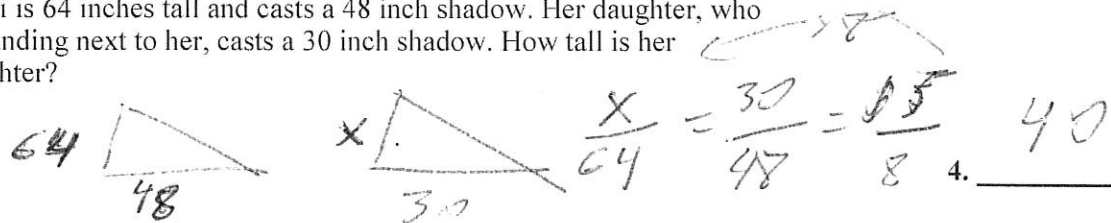
2. G

3. Which pair of polygons is similar?



3. D

4. Mitzi is 64 inches tall and casts a 48 inch shadow. Her daughter, who is standing next to her, casts a 30 inch shadow. How tall is her daughter?



4. 40

5. Which of the following statements is *not* true if quadrilateral $ABCD$ is congruent to quadrilateral $RSTU$?

- A. $\overline{AB} \cong \overline{RS}$
- B. $\overline{CD} \cong \overline{TU}$
- C. $\angle T \cong \angle C$
- D. $\angle A \cong \angle U$

5. D

not corresponding