

Practice A

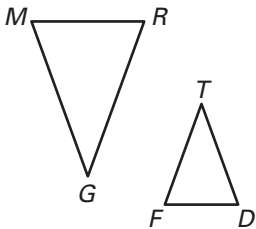
For use with pages 473–479

You are given the length and width of three rectangles. Which two are similar?

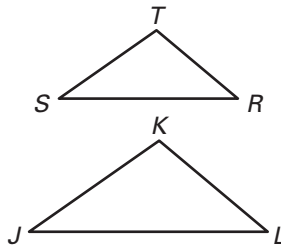
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|--|----------------------------|---------------------------|
| 1. a. 5 in. $\times$ 7 in. | b. 8.5 in. $\times$ 11 in. | c. 10 in. $\times$ 14 in. |
| 2. a. 4 ft $\times$ 5 ft | b. 20 ft $\times$ 25 ft | c. 8 cm $\times$ 1 m |
| 3. a. 3 cm $\times$ 15 cm | b. 3 ft $\times$ 15 in. | c. 6 cm $\times$ 30 cm |
| 4. a. $\frac{3}{2}$ cm $\times$ $\frac{7}{2}$ cm | b. 21 in. $\times$ 49 in. | c. 1 ft $\times$ 3 ft |

List all pairs of congruent angles and write the statement of proportionality for the figures.

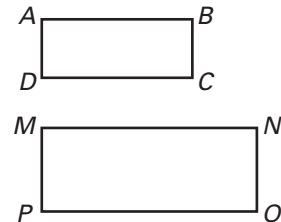
5. $\triangle GRM \sim \triangle TFD$



6. $\triangle STR \sim \triangle JKL$

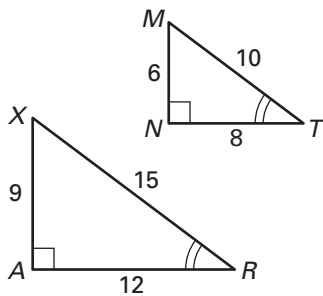


7. $\square ABCD \sim \square MNOP$

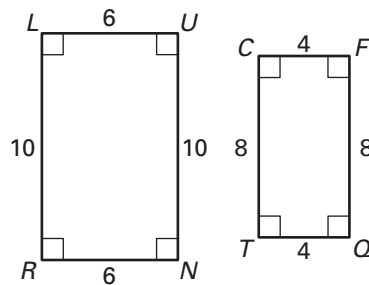


Decide whether the polygons are similar. If so, write a similarity statement.

8.



9.



In the diagram at the right, polygon $ABCD \sim$ polygon $GHIJ$.

- Find the scale factor of polygon $ABCD$ to polygon $GHIJ$.
- Find the scale factor of polygon $GHIJ$ to polygon $ABCD$.
- Find the values of x and y .
- Find the perimeter of each polygon.
- Find the ratio of the perimeter of $ABCD$ to the perimeter of $GHIJ$.

