

Geometry – Chapter 6 Practice Quiz

Solve each proportion

1. $\frac{x}{6} = \frac{9}{24}$

2. $\frac{8}{x} = \frac{12}{x+6}$

3. $\frac{2y-7}{5} = \frac{y-3}{3}$

4. $\frac{5}{13} = \frac{m}{52}$

Reduce each ratio

5. $\frac{25 \text{ min}}{2 \text{ hr}}$

6. $\frac{18 \text{ in}}{3 \text{ yd}}$

7. $\frac{80 \text{ mm}}{0.6 \text{ cm}}$

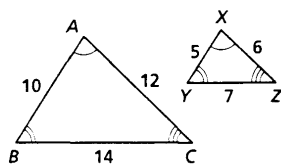
8. $\frac{26 \text{ cm}}{2 \text{ m}}$

9. The perimeter of a rectangle is 40 feet. The ratio of the width to the length is 2:3. Find the length and the width.

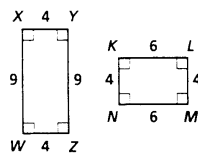
10. The measures of the angles in a triangle are in the extended ratio of 2:5:8. Find the measures of the angles.

Are the polygons similar? If yes, write a similarity statement. If no, write not similar.

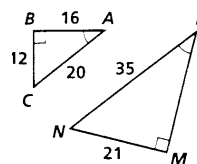
11.



12.

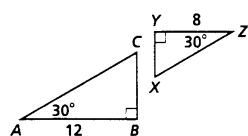


13.

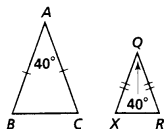


Are the pairs of triangles similar? If so, state the postulate or theorem that allows you to make that conclusion and write a similarity statement.

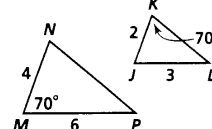
14.



15.



16.



17. Use the given information to find the height of the flagpole.

- The mirror (point X) is placed 15 feet from the base of the flagpole
- The person is standing 4 feet from the mirror
- The height of the person is 6 feet.

Note: the diagram is *not* drawn to scale

