Name_____Date_____Per_____
Geometry Ch. 7 Practice Test

Solve each proportion.

1. $\frac{4x-5}{3} = -\frac{26}{6}$

x = _____

2. $\frac{3x-1}{-4} = \frac{1}{x+2}$

x = _____

3. The ratio of the measures of the ∠'s in a Δ is 1:2:7.
Find x and the measure of each ∠ of the Δ.

x = _____

_____

_____

_____

4. The ratio of the sides of a Δ is 4:5:7 and its perimeter is 64 centimeters.
Find x and the measure of each side of the Δ.

x = _____

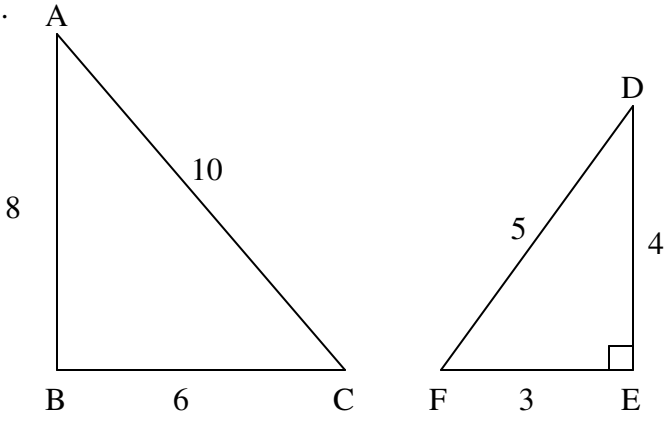
_____

_____

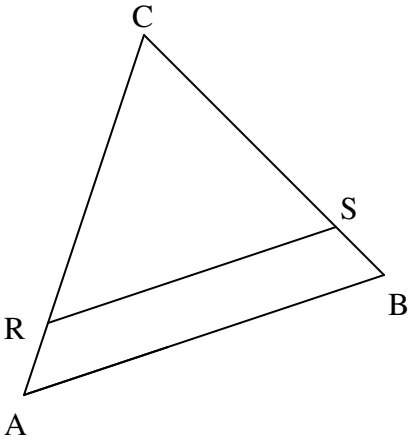
_____

Determine if each pair of triangles is similar.
If so, write a **similarity statement** and **verify why**. (AA ~, SAS ~, SSS ~)

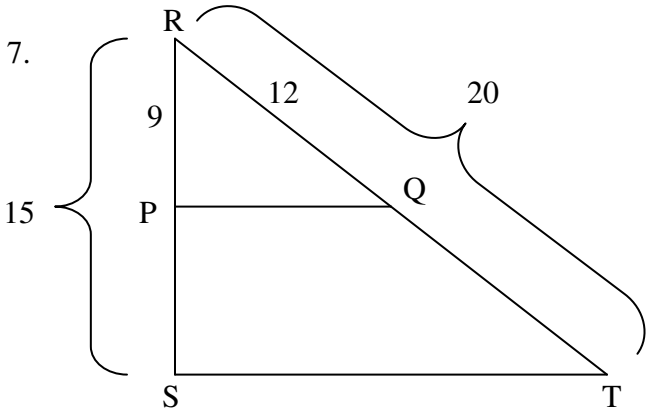
5.



6.



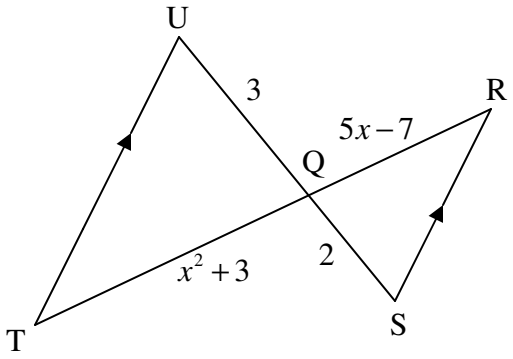
7.



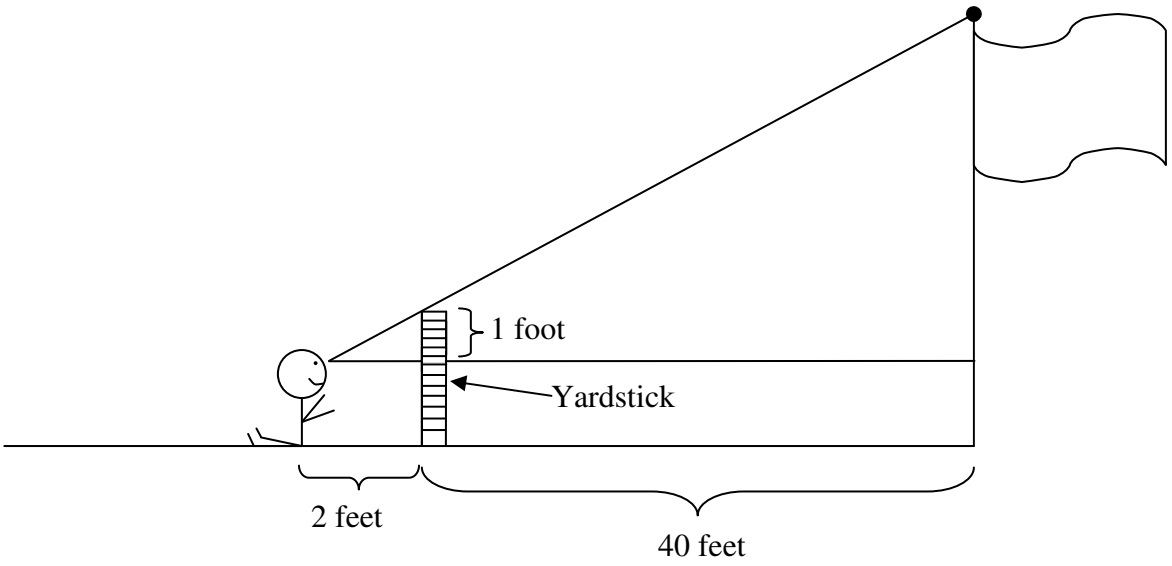
8. Use the following similar Δ's to find x and QT. (HINT: There are 2 answers for both x and QT)

x = _____

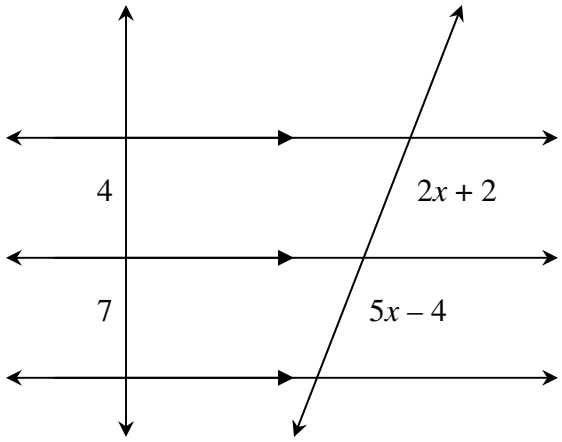
QT = _____



9. A boy and his friend wish to calculate the height of a flagpole. One boy holds a yardstick vertically at a point 40 feet from the base of a flagpole, as shown. The other boy backs away from the pole to a point where he sights the top of the flagpole over the top of the yardstick. If his position is 2 feet from the yardstick and his eye level is 2 feet above the ground, Find the height of the flagpole.

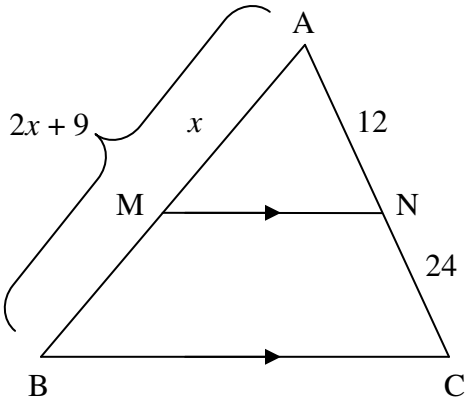


10. Use the following picture to find x.



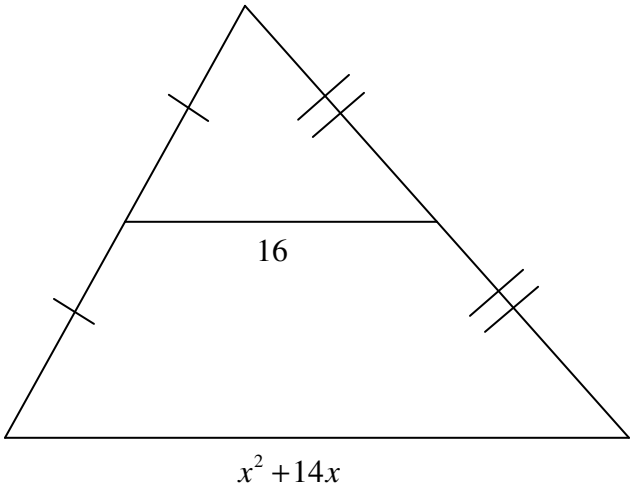
x = _____

11. Find x in the following picture.



x = _____

12. Find x in the following figure.
(HINT: There are 2 answers for x)



x = _____

13. $\Delta AWE \sim \Delta NUM$ with medians AX and NY. If AW = 2, AX = 14, and NU = 7.
Find NY.

NY = _____

14. $\Delta ABC \sim \Delta XYZ$ and AB = 10, YZ = 15, XZ = 12, and AC = 8.
Determine the scale factor.

15. Find the value of x.