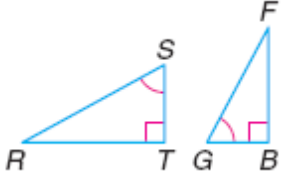
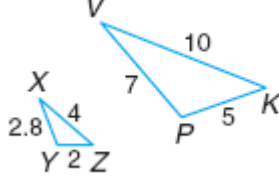
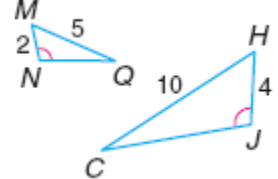
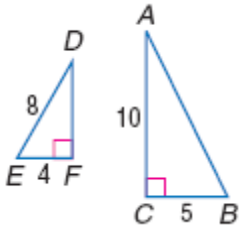
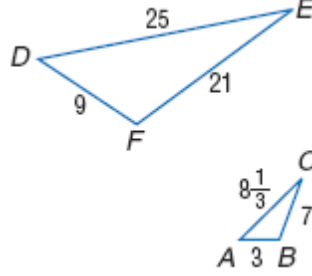
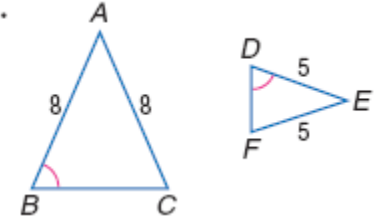
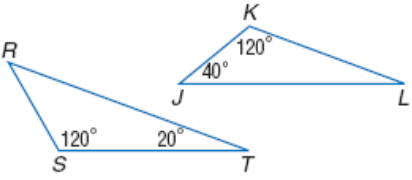
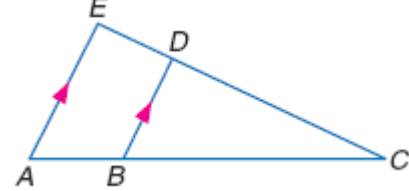
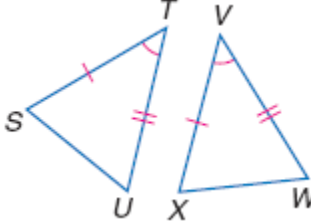


Determine if the triangles are similarity. If they are similar, complete the similarity statement, state why they are similar, and give the little to big ratio if possible.

<p>1. $\triangle RST \sim \triangle$ _____ or $\not\sim$ By _____</p>  <p>Little to Big Ratio:</p>	<p>2. $\triangle XYZ \sim \triangle$ _____ or $\not\sim$ By _____</p>  <p>Little to Big Ratio:</p>	<p>3. $\triangle MNQ \sim \triangle$ _____ or $\not\sim$ By _____</p>  <p>Little to Big Ratio:</p>
<p>4. $\triangle DEF \sim \triangle$ _____ or $\not\sim$ By _____</p>  <p>Little to Big Ratio:</p>	<p>5. $\triangle DEF \sim \triangle$ _____ or $\not\sim$ By _____</p>  <p>Little to Big Ratio:</p>	<p>6. $\triangle DEF \sim \triangle$ _____ or $\not\sim$ By _____</p>  <p>Little to Big Ratio:</p>
<p>7. $\triangle RST \sim \triangle$ _____ or $\not\sim$ By _____</p>  <p>Little to Big Ratio:</p>	<p>8. $\triangle ABC \sim \triangle$ _____ or $\not\sim$ By _____</p>  <p>Little to Big Ratio:</p>	<p>9. $\triangle ABC \sim \triangle$ _____ or $\not\sim$ By _____</p>  <p>Little to Big Ratio:</p>

10.

Alicia

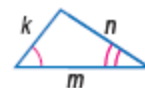
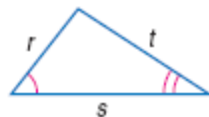
$$\frac{r}{k} = \frac{s}{m}$$

$$rm = ks$$

Jason

$$\frac{r}{k} = \frac{m}{s}$$

$$rs = km$$



Who is correct? Explain your reasoning.

Fill in each proof:

11. Given: $\angle B \cong \angle E$,
 $\angle A$ and $\angle D$ are right angles
 Prove: $\frac{BC}{EC} = \frac{AB}{DE}$

- a. $\angle B \cong \angle E$
- b. $\angle A$ and $\angle D$ are right angles.
- c. $\angle A \cong \angle D$
- d. $\triangle ABC \sim \triangle DEC$
- e. $\frac{BC}{EC} = \frac{AB}{DE}$

12. Given: $\overline{JK} \parallel \overline{GH}$
 Prove: $\frac{FJ}{FG} = \frac{FK}{FH}$

- a. $\overline{JK} \parallel \overline{GH}$
- b. $\angle 1 \cong \angle 2$
- c. $\angle F \cong \angle F$
- d. $\triangle FJK \sim \triangle FGH$
- e. $\frac{FJ}{FG} = \frac{FK}{FH}$

13. A lighthouse casts a 128-foot shadow. A nearby lamppost that measures 5 feet 3 inches casts an 8-foot shadow.

- A. 5 feet 3 inches is 5._____ feet.
- B. Write a proportion that can be used to determine the height of the lighthouse.
- C. What is the height of the lighthouse?

Find the little to big ratio, set up a proportion, and solve for each variable.

14. Little to big ratio:

Proportion to solve for x:

x = _____

15. Little to big ratio:

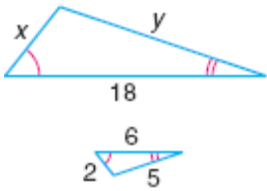
Proportion to solve for x: _____

Proportion to solve for y: _____

x = _____

y = _____

16. Little to big ratio:



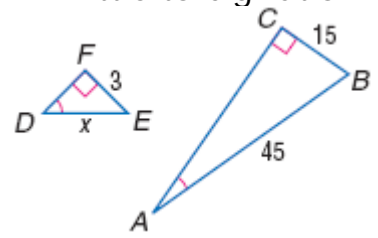
Proportion to solve for x:

$x = \underline{\hspace{2cm}}$

Proportion to solve for y:

$y = \underline{\hspace{2cm}}$

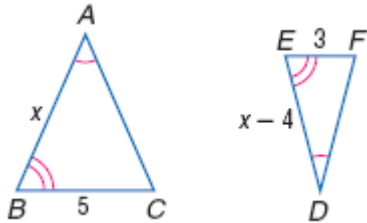
17. Little to big ratio:



Proportion to solve for x:

$x = \underline{\hspace{2cm}}$

18. Little to big ratio:

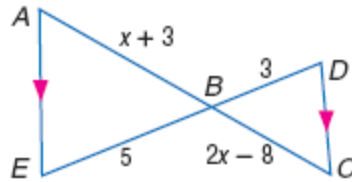


Proportion to solve for x:

$x = \underline{\hspace{2cm}}$

$ED = \underline{\hspace{2cm}}$

19. Little to big ratio:



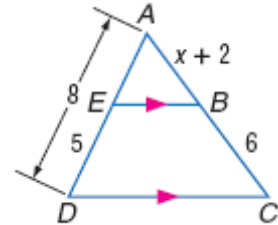
Proportion to solve for x:

$x = \underline{\hspace{2cm}}$

$BC = \underline{\hspace{2cm}}$

$AB = \underline{\hspace{2cm}}$

20. Little to big ratio:

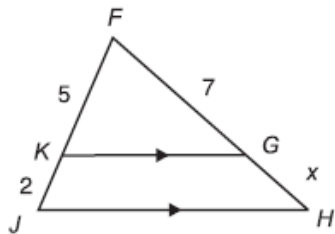


Proportion to solve for x:

$x = \underline{\hspace{2cm}}$

$AB = \underline{\hspace{2cm}}$

21. Little to big ratio:

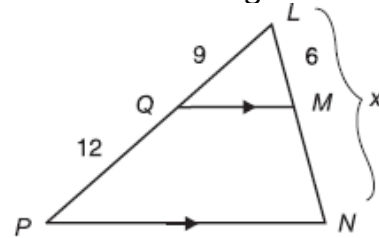


Proportion to solve for x:

$x = \underline{\hspace{2cm}}$

$FH = \underline{\hspace{2cm}}$

22. Little to big ratio:

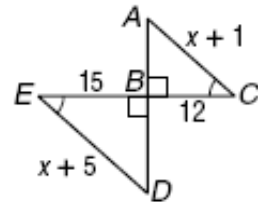


Proportion to solve for x:

$x = \underline{\hspace{2cm}}$

$MN = \underline{\hspace{2cm}}$

23. Little to big ratio:

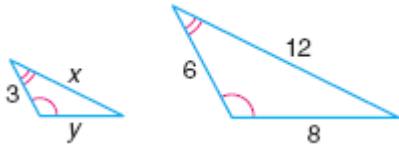


Proportion to solve for x:

$x = \underline{\hspace{2cm}}$

$AC = \underline{\hspace{2cm}}$

24. Little to big ratio:



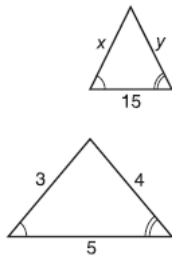
Proportion to solve for x:

$x = \underline{\hspace{2cm}}$

Proportion to solve for y:

$y = \underline{\hspace{2cm}}$

25. Little to big ratio:



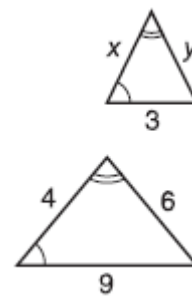
Proportion to solve for x:

$x = \underline{\hspace{2cm}}$

Proportion to solve for y:

$y = \underline{\hspace{2cm}}$

26. Little to big ratio:



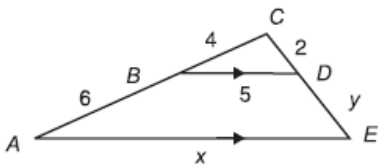
Proportion to solve for x:

$x = \underline{\hspace{2cm}}$

Proportion to solve for y:

$y = \underline{\hspace{2cm}}$

27. Little to big ratio:



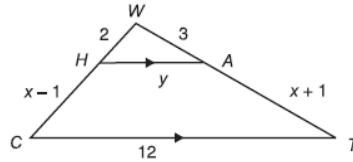
Proportion to solve for x:

$x = \underline{\hspace{2cm}}$

Proportion to solve for y:

$y = \underline{\hspace{2cm}}$

28. Little to big ratio:



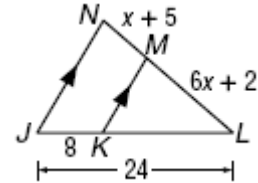
Proportion to solve for x:

$x = \underline{\hspace{2cm}}$

Proportion to solve for y:

$y = \underline{\hspace{2cm}}$

29. Little to big ratio:



Proportion to solve for x:

$x = \underline{\hspace{2cm}}$

NM = $\underline{\hspace{2cm}}$

ML = $\underline{\hspace{2cm}}$