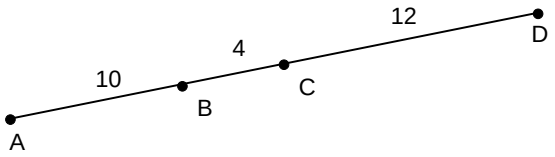
Name_____ Block_____

Ch 7 Review

Express the ratio in simplest form.



1) $AB:CD$ 2) $BC:CD$ 3) $AB:AC$ 4) $BC:AB:CD$

5) If $\frac{a}{b}=\frac{c}{d}$, then which of the following are true?

a. $\frac{a}{c}=\frac{b}{d}$ b. $\frac{c}{b}=\frac{a}{d}$ c. $\frac{d}{c}=\frac{b}{a}$ d. $\frac{a+b}{b}=\frac{c+d}{d}$

Solve for x.

6) $\frac{x}{3}=\frac{2}{5}$ 7) $a:3=7:4$ 8) $\frac{3x}{7}=\frac{2}{10}$

9) $\frac{x+2}{x+3}=\frac{4}{5}$ 10) $\frac{2x+1}{4x-1}=\frac{2}{3}$ 11) $\frac{x+3}{2}=\frac{2x-1}{3}$

Tell whether the two polygons are always, sometimes, or never similar.

12) Two rhombuses

13) Two equilateral triangles

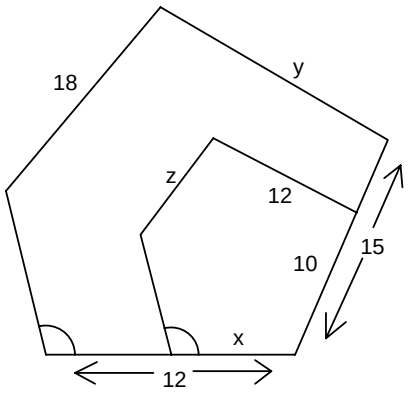
14) Two regular pentagons

15) Two rectangles

16) Two squares

17) Two isosceles triangles

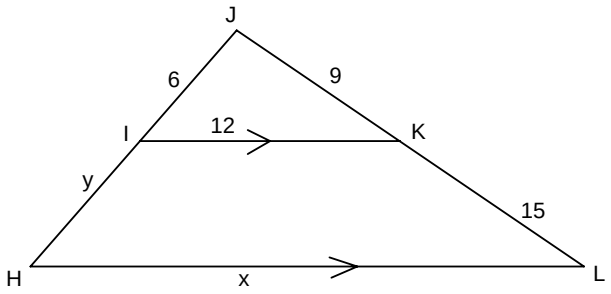
Find x, y, z given two similar polygons.



18) $\Delta IJK \sim \Delta$ _____

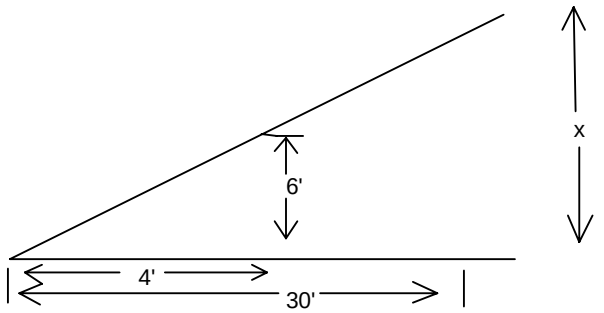
19) $\angle JIK$ _____ $\angle JHL$

20) Find x.



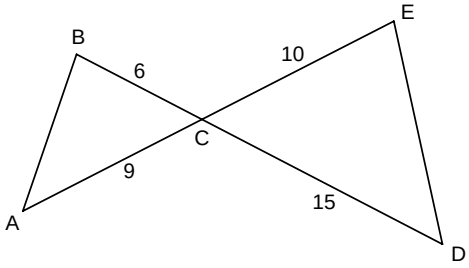
21) Find y

22) What is the height of the tree?

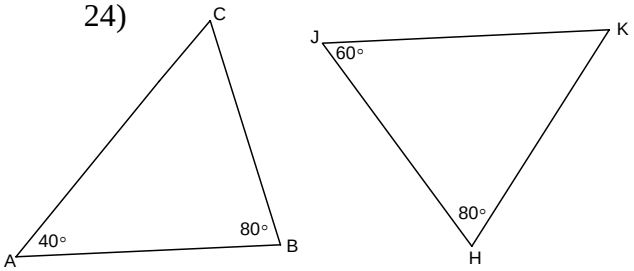


Name the similar triangles. State the postulate or theorem.

23)



24)



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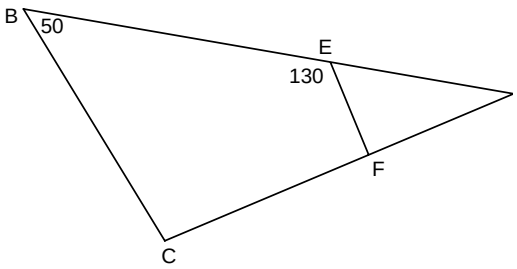

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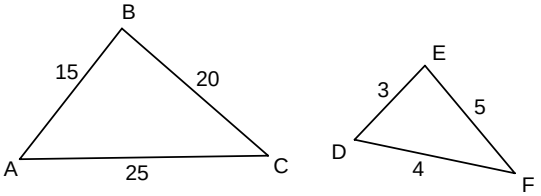
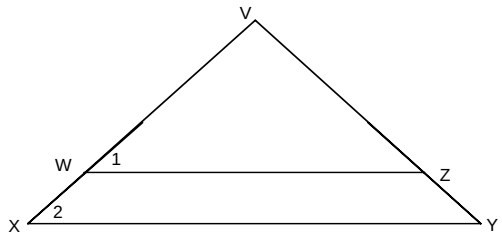


27) Given: $\frac{VW}{VX} = \frac{VZ}{VY}$

Prove: $\overline{WZ} \parallel \overline{XY}$



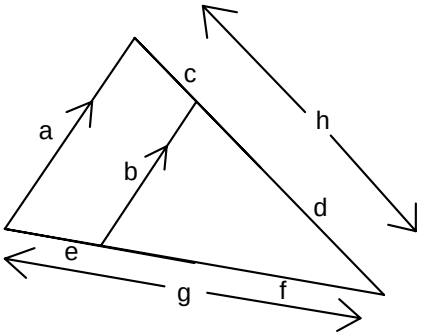
Tell whether the proportion is correct.

28) a. $\frac{e}{c} = \frac{f}{d}$

b. $\frac{f}{c} = \frac{e}{d}$

c. $\frac{d}{h} = \frac{a}{b}$

d. $\frac{f}{g} = \frac{h}{d}$

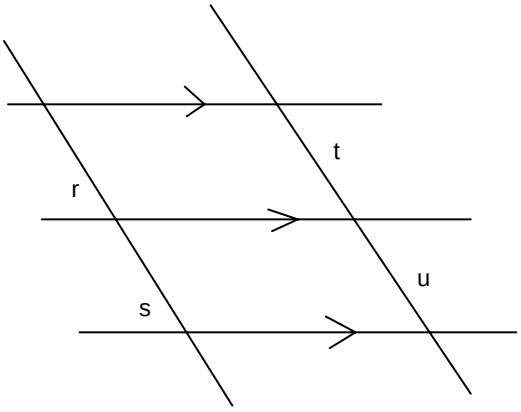


29) a. $\frac{r}{s} = \frac{t}{u}$

b. $\frac{r}{t} = \frac{s}{u}$

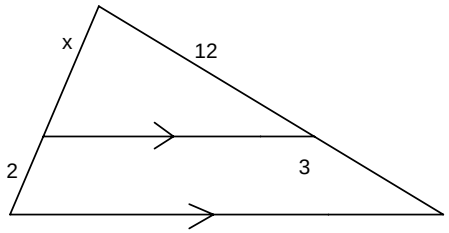
c. $\frac{r}{r+s} = \frac{u}{t+u}$

d. $\frac{u}{t} = \frac{s}{r}$

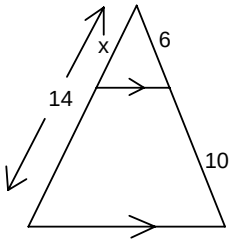


Find x.

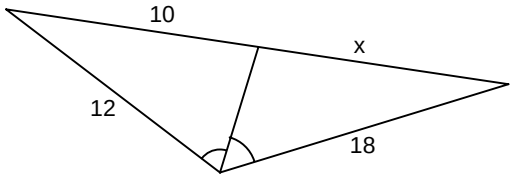
30)



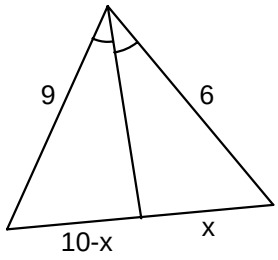
31)



32)



33)



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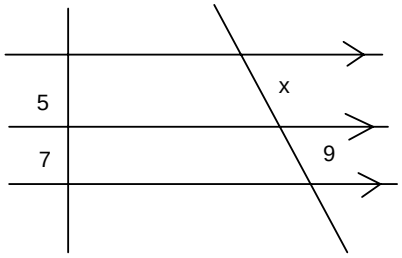

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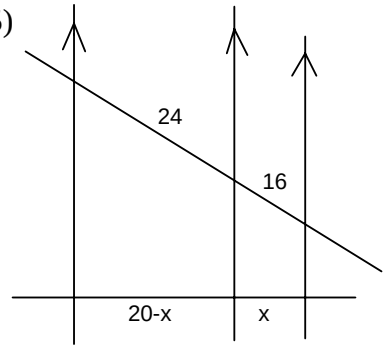

Complete

36) $AB = 14, BC = 21, AD = 8, DC =$ _____

37) $AB = 8, BC = 10, AD = x, DC = 18$

Find x