

12-7-17 5<sup>th</sup> Geo

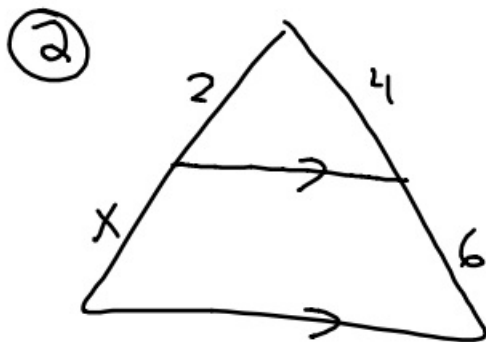
$$\textcircled{1} \quad \frac{x-3}{2} = \frac{3x-1}{4}$$

$$2(3x-1) = 4(x-3)$$

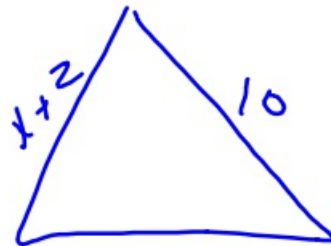
$$6x-2 = 4x-12$$

$$\begin{array}{r} -4x \quad -4x \\ \hline 2x-2 = -12 \\ +2 \quad +2 \\ \hline 2x = -10 \end{array}$$

$$x = -5$$



$$\begin{aligned} \frac{2}{x} &= \frac{4}{6} \\ 4x &= 12 \\ x &= 3 \end{aligned}$$



$$\frac{2}{x+2} = \frac{4}{10}$$

$$4(x+2) = 20$$

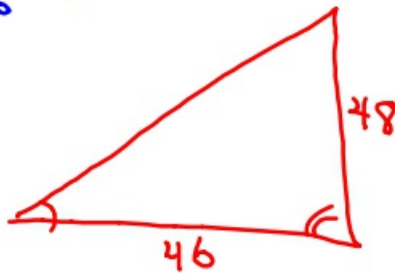
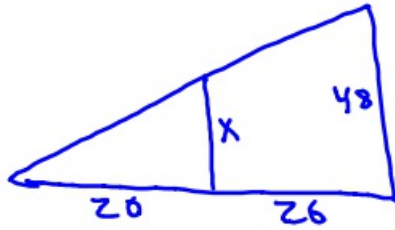
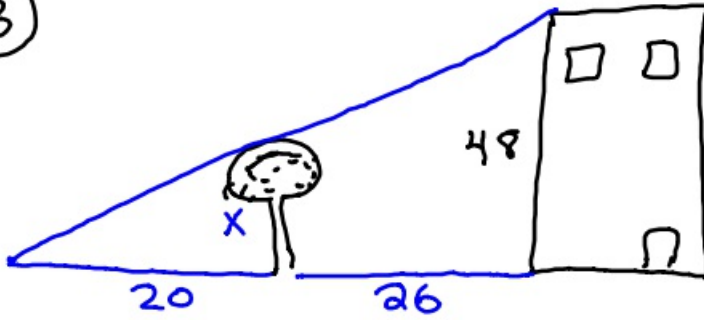
$$4x+8 = 20$$

$$\begin{array}{r} -8 \quad -8 \\ \hline 4x = 12 \end{array}$$

$$\frac{4x}{4} = \frac{12}{4}$$

$$x = 3$$

3



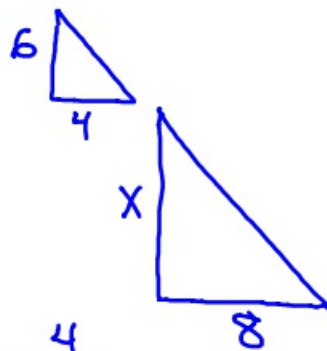
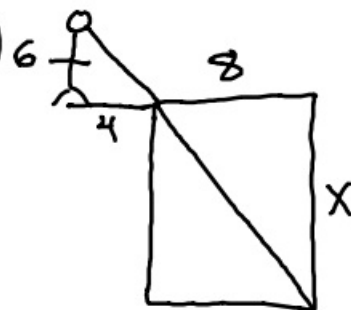
$$\frac{x}{48} = \frac{20}{46}$$

$$\frac{46x}{46} = \frac{960}{46}$$

$$x = \frac{20 \cdot 20}{23}$$

$$x \approx 20.87$$

4

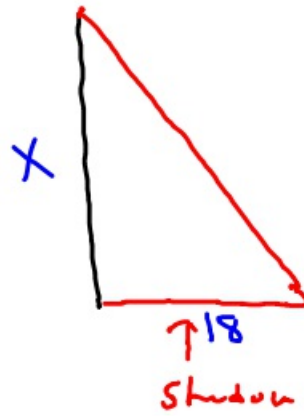
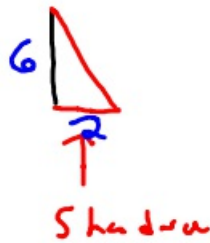


$$\frac{6}{x} = \frac{4}{8}$$

$$4x = 48$$

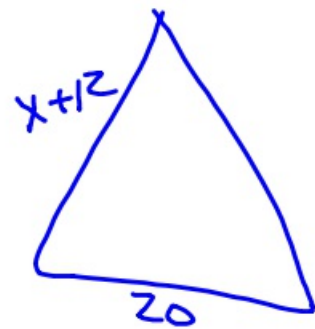
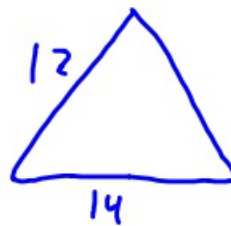
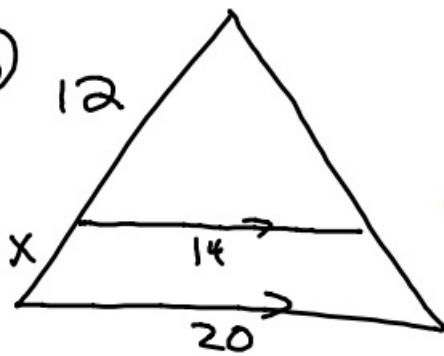
$$x = 12$$

5



$$\frac{6}{X} = \frac{2}{18}$$
$$2X = 108$$
$$X = 54$$

6



$$\frac{12}{X+12} = \frac{14}{20}$$

$$14(X+12) = 240$$

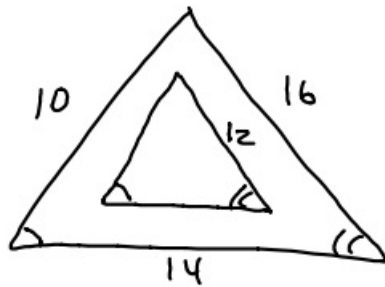
$$14X + 168 = 240$$

$$\underline{-168 \quad -168}$$

$$\frac{14X}{14} = \frac{72}{14}$$

$$X = 5.14$$

- ⑦ Find perimeter of small triangle if they are similar.

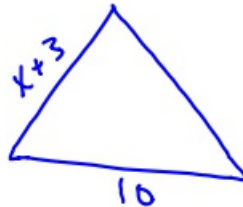
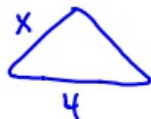
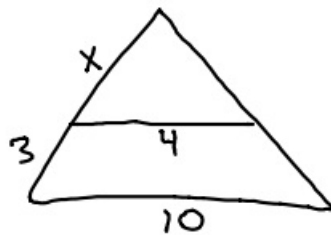


$$\frac{12}{16} = \frac{p}{40}$$

$$16p = 480$$

$$p = 30$$

⑧



$$\frac{x}{x+3} = \frac{4}{10}$$

$$10x = 4(x+3)$$

$$10x = 4x + 12$$

$$6x = 12$$

$$x = 2$$

12-7-17 6<sup>th</sup> Geo

$$\textcircled{1} \quad \frac{x+4}{5} = \frac{x-1}{4}$$

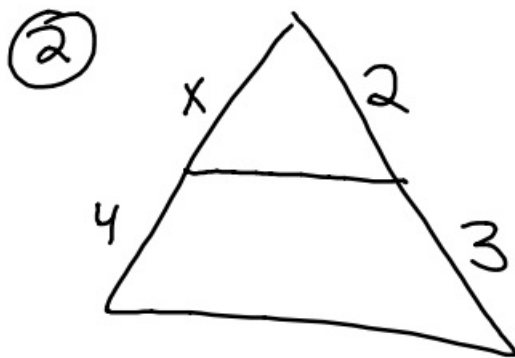
$$5(x-1) = 4(x+4)$$

$$5x-5 = 4x+16$$

$$\begin{array}{r} -4x \qquad -4x \\ \hline \end{array}$$

$$\begin{array}{r} x-5 = 16 \\ +5 \quad +5 \\ \hline \end{array}$$

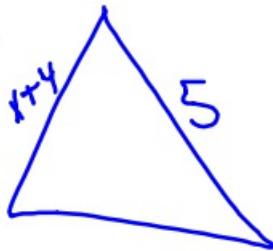
$$x = 21$$



$$\frac{x}{4} = \frac{2}{3}$$

$$3x = 8$$

$$x = 2\frac{2}{3}$$



$$\frac{x}{x+4} = \frac{2}{5}$$

$$5x = 2(x+4)$$

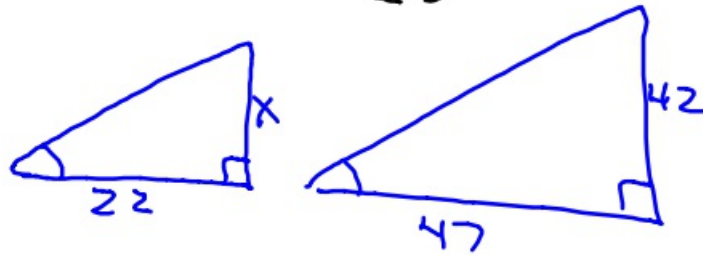
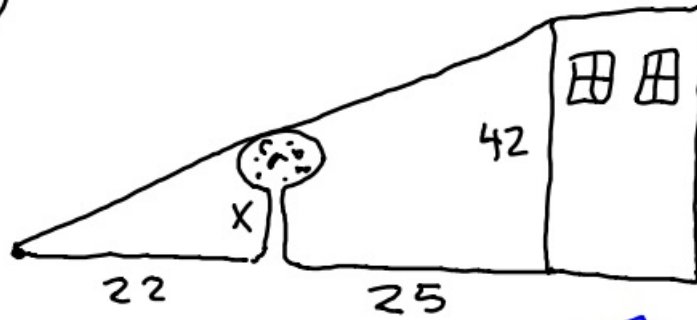
$$5x = 2x + 8$$

$$\begin{array}{r} -2x \quad -2x \\ \hline \end{array}$$

$$\frac{3x}{3} = \frac{8}{3}$$

$$x = 2\frac{2}{3}$$

③

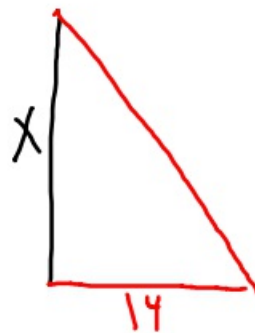


$$\frac{22}{47} = \frac{x}{42}$$

$$\frac{47}{47} x = \frac{924}{47}$$

$$x \approx 19.7$$

④

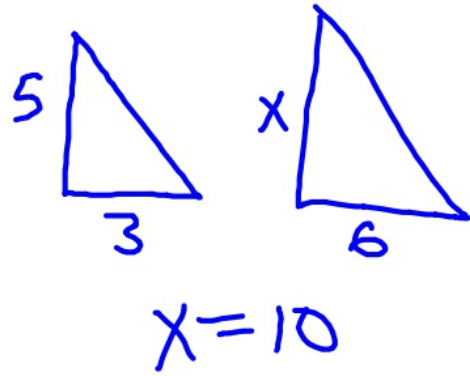
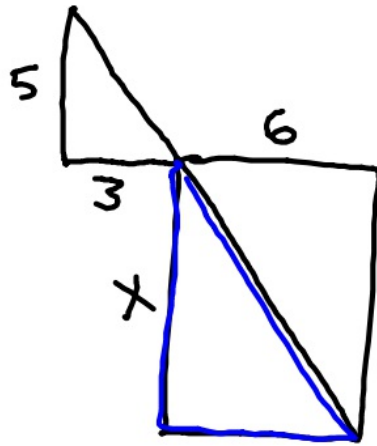


$$\frac{6}{x} = \frac{1/3}{14}$$

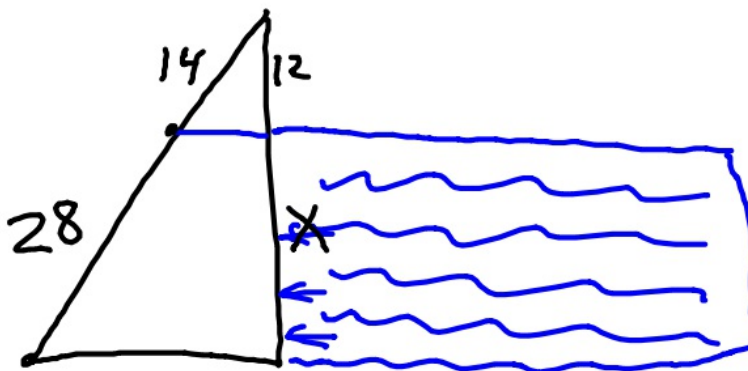
$$3 \cdot \frac{1}{3} x = 84 \cdot 3$$

$$x = 252$$

⑤



⑥



$$\frac{14}{28} = \frac{12}{x}$$

$$x = 24$$