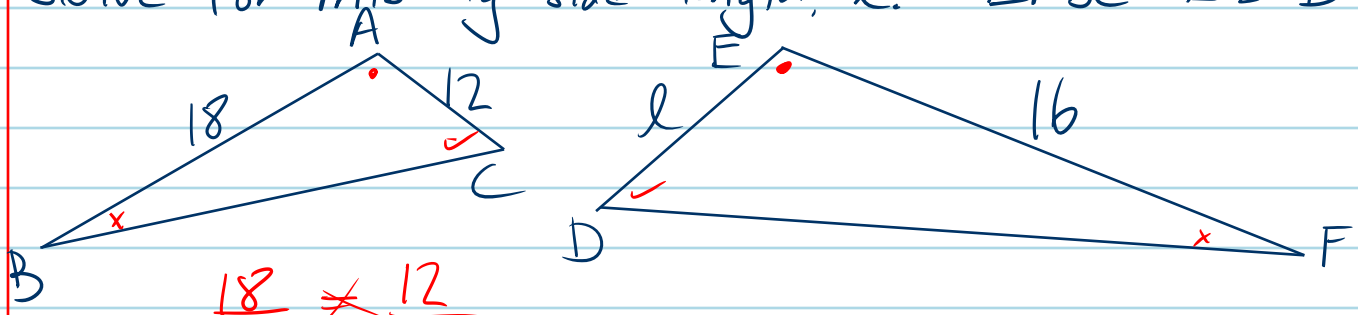
May.27th, 2016

Unit 6 Day 2
6-2 Proportion Equations

1) Solve for missing side length, ℓ. $\triangle ABC \sim \triangle EFD$



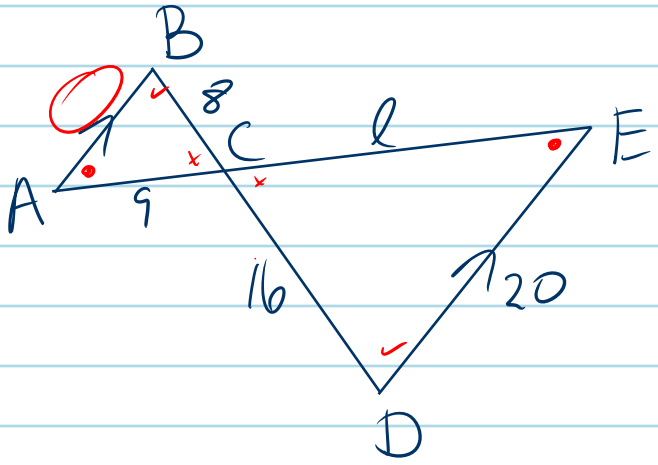
$\frac{18}{16} = \frac{12}{\ell}$

$18\ell = 12 \cdot 16$

$\ell = \frac{12 \cdot 16}{18} = \frac{32}{3}$

$\ell = \frac{12 \cdot 16}{18}$

2)



$\frac{8}{16} = \frac{9}{\ell} = \frac{20}{?}$

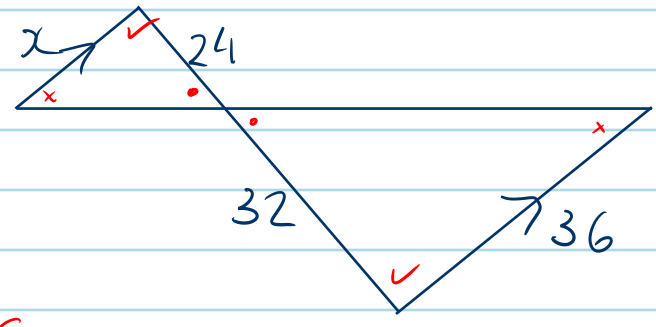
$\frac{8\ell}{8} = \frac{9 \cdot 16}{8}$

$\ell = 18$

Unit 6 Day 2 Cont. Dec. 8, 2015

6-2 Proportion Equations (II)

1) Solve for x:



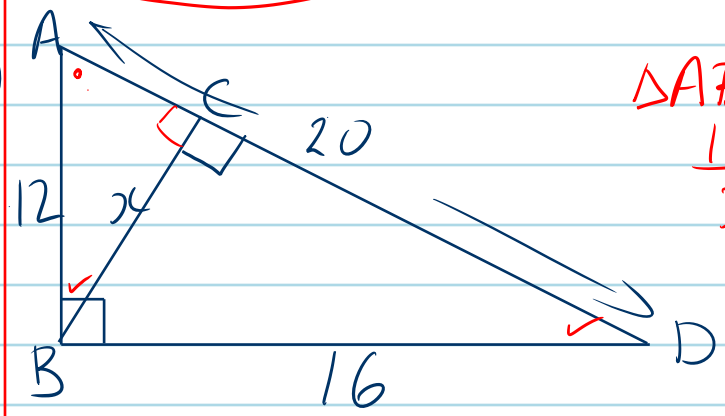
$$\frac{x}{36} = \frac{24}{32}$$

$$\frac{x}{36} \times \frac{3}{4}$$

$$\frac{4x}{4} = \frac{3 \cdot 36^{9}}{4}$$

$$x = 27$$

2)



$\triangle ABD \sim \triangle ACB$

$$\frac{16}{x} = \frac{20}{12} = \frac{12}{?}$$

$$\frac{16}{x} = \frac{5}{3}$$

$$5x = 16 \cdot 3$$

$$\frac{5x}{5} = \frac{48}{5}$$

$$x = \frac{48}{5}$$