

6.2

3) If $\frac{8}{x} = \frac{3}{y}$, then $\frac{8}{3} = \frac{x}{y}$

4) If $\frac{x}{9} = \frac{y}{20}$, then $\frac{x}{y} = \frac{9}{20}$

5) If $\frac{x}{6} = \frac{y}{15}$, then $\frac{x+6}{6} = \frac{y+15}{15}$

6) If $\frac{14}{3} = \frac{x}{y}$, then $\frac{17}{3} = \frac{x+y}{y}$

7) If $\frac{8}{m} = \frac{n}{9}$, then $\frac{8+m}{m} = \frac{n+9}{9}$

8) If $\frac{5}{7} = \frac{9}{6}$, then $\frac{7}{5} = \frac{9}{6}$

$mn = 8(9)$
 $mn = 72$

$9(8+m) = m(n+9)$
 $72 + 9m = mn + 9m$

$7a = 5b$

$7b = 5a$ **False**

$72 = mn$ **True**

9) If $\frac{d}{2} = \frac{8+10}{11}$, then $\frac{d}{8+10} = \frac{2}{11}$

10) If $\frac{4+x}{4} = \frac{3+y}{y}$ then $\frac{x}{4} = \frac{3}{y}$

$11d = 2(8+10)$
 $11d = 36$

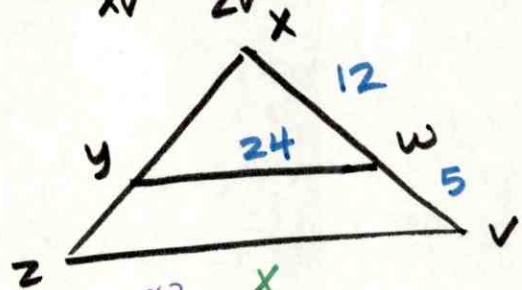
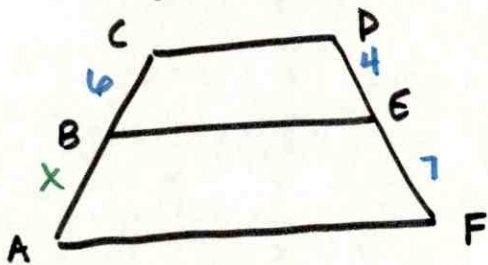
$11d = 2(8+10)$
 $11d = 36$ **True**

$y(4+x) = 4(3+y)$ $xy = 4(3)$
 $4y + xy = 12 + 4y$ $xy = 12$ **True**

$xy = 12$

11) Given $\frac{CB}{BA} = \frac{DE}{EF}$, find BA

12) Given $\frac{xw}{xv} = \frac{yw}{zv}$, find zv.



$\frac{6}{x} = \frac{4}{7}$

$4x = 42$

$x = 21/2$

$\frac{12}{17} = \frac{24}{x}$

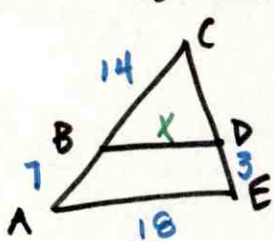
$x = 17(2)$

$x = 34$

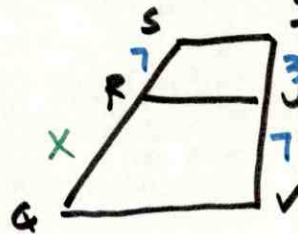
16) Given $\frac{CA}{CB} = \frac{AE}{BD}$, find BD

17) Given $\frac{SR}{SR} = \frac{TV}{TV}$, find RQ.

$\frac{x}{7} = \frac{10}{3}$
 $x = \frac{70}{3}$



$\frac{3x}{14} = \frac{18}{x}$
 $3x = 36$
 $x = 12$



$\frac{7+x}{7} = \frac{10}{3}$

$3(7+x) = 70$
 $21 + 3x = 70$

$3x = 49$
 $x = 49/3$

18) x, y, z and q are 4 different #'s

19) $(8, 16, 20) = k(2, 4, 5)$ find k.

$\frac{x}{y} = \frac{z}{q}$, which is false?
 $xq = yz$ $\frac{y}{x} = \frac{z}{q} \Rightarrow xz = yq$

$k = 4$