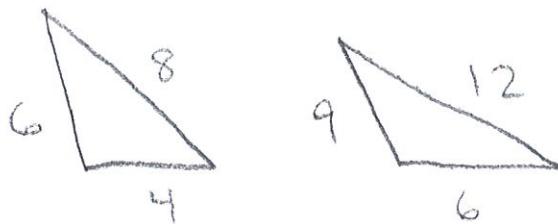


Pg. 74 (4-20 skip 15+19!)

④



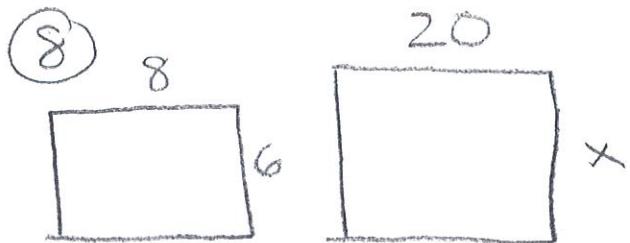
* write a proportion

(multiple proportions possible!)

$$\frac{36}{h} = \frac{36}{b}$$

~~$\frac{6}{4} = \frac{9}{6}$~~

⑧



$$\frac{8}{6} = \frac{20}{x}$$

$$\frac{8x}{8} = \frac{120}{8}$$

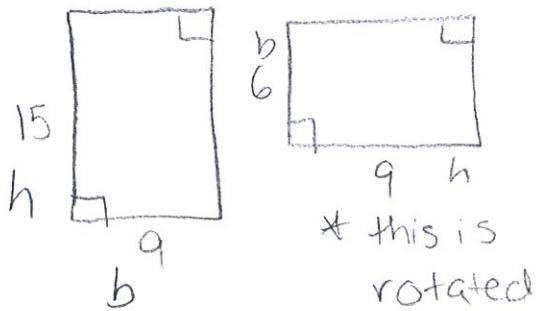
$$x = 15$$

Yes, since corr sides are proportional, angles are congruent.

⑨



⑤



$$\frac{15}{9} = \frac{x}{4}$$

$$\frac{9x}{9} = \frac{60}{9}$$

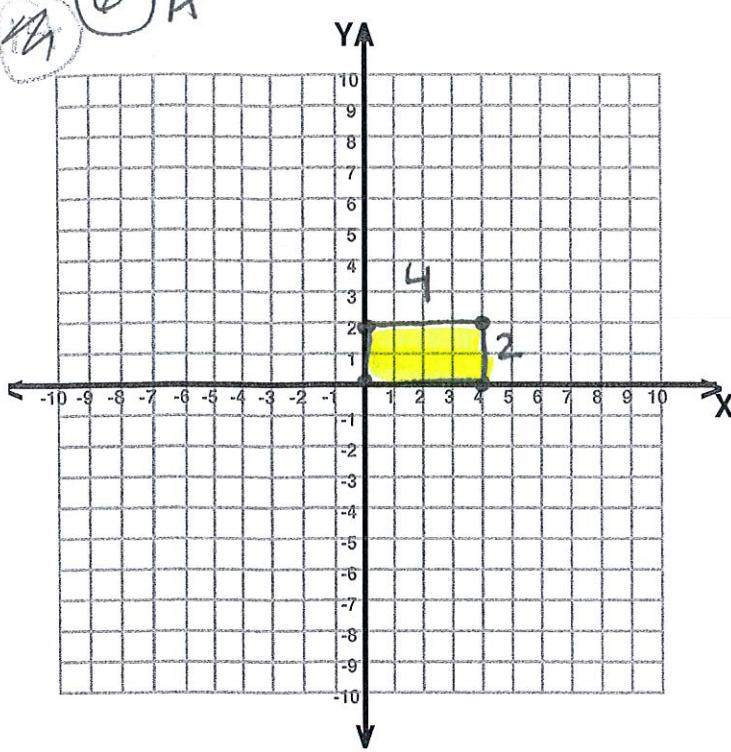
$$x = 6.\overline{6}$$

$$\frac{15}{9} = \frac{9}{6}$$

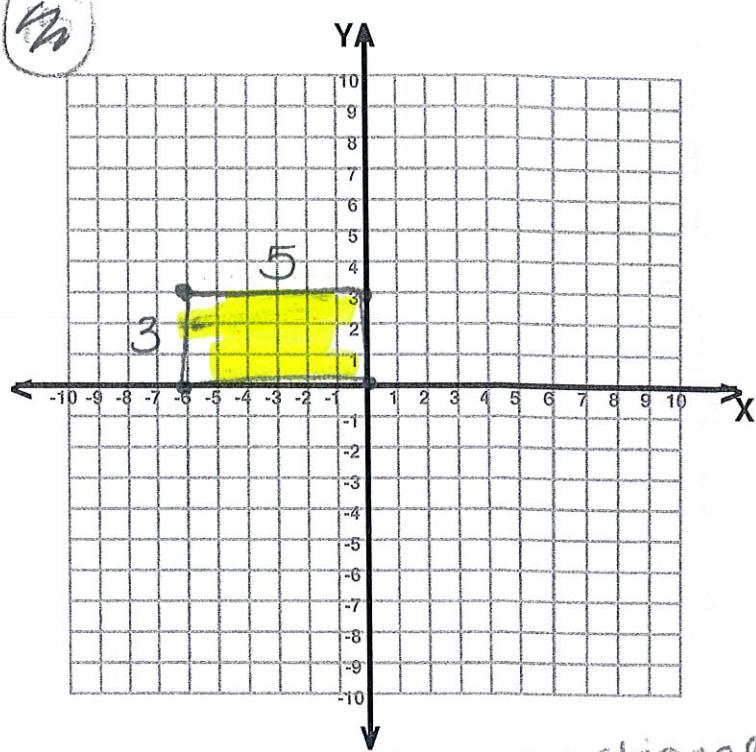
~~$\frac{15}{9} = \frac{81}{6}$~~

No, cross products are not equal!

6A



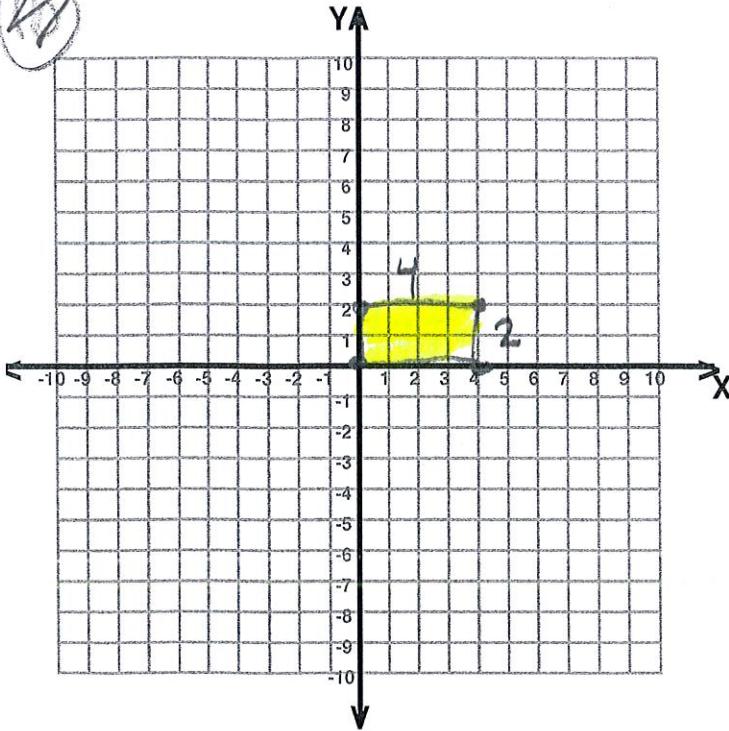
6B



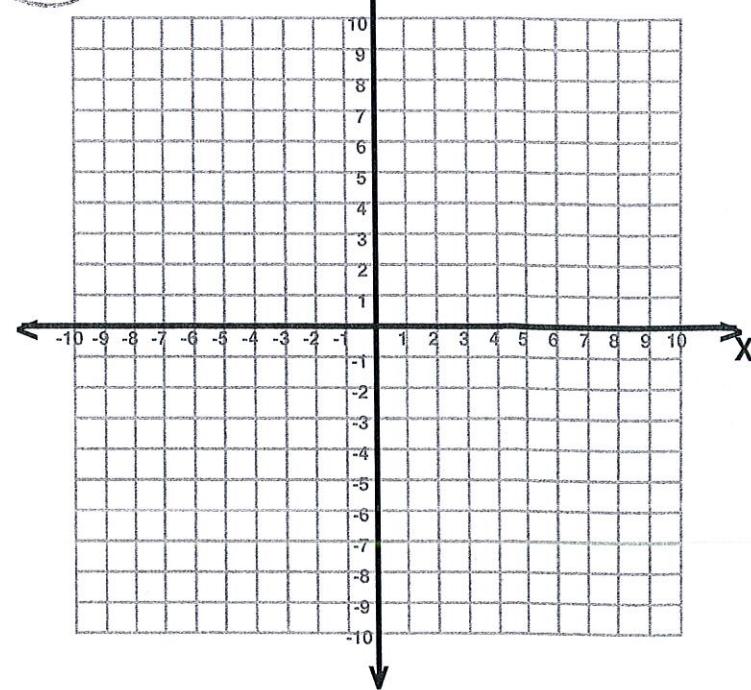
A+C,
Same length + width

B is not proportional
to A or C

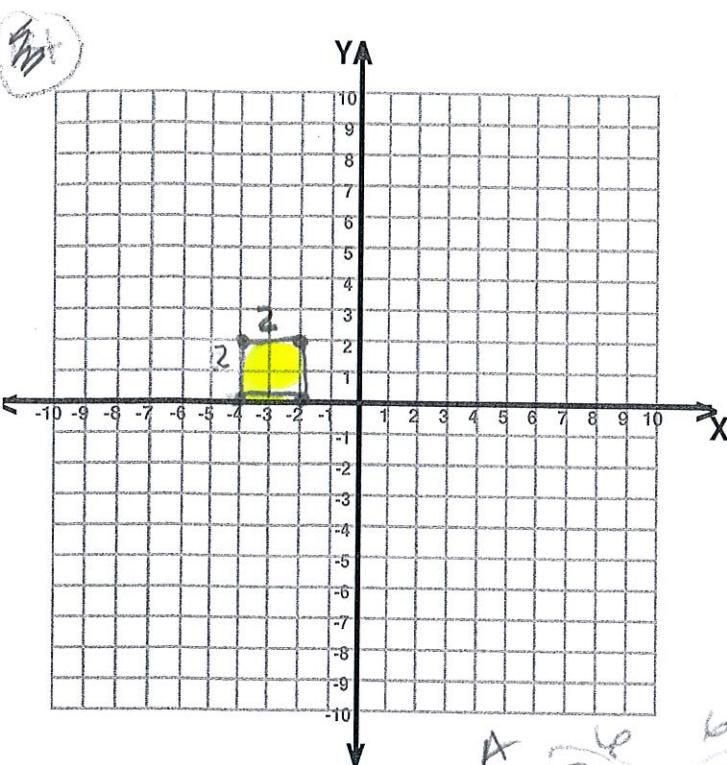
6C



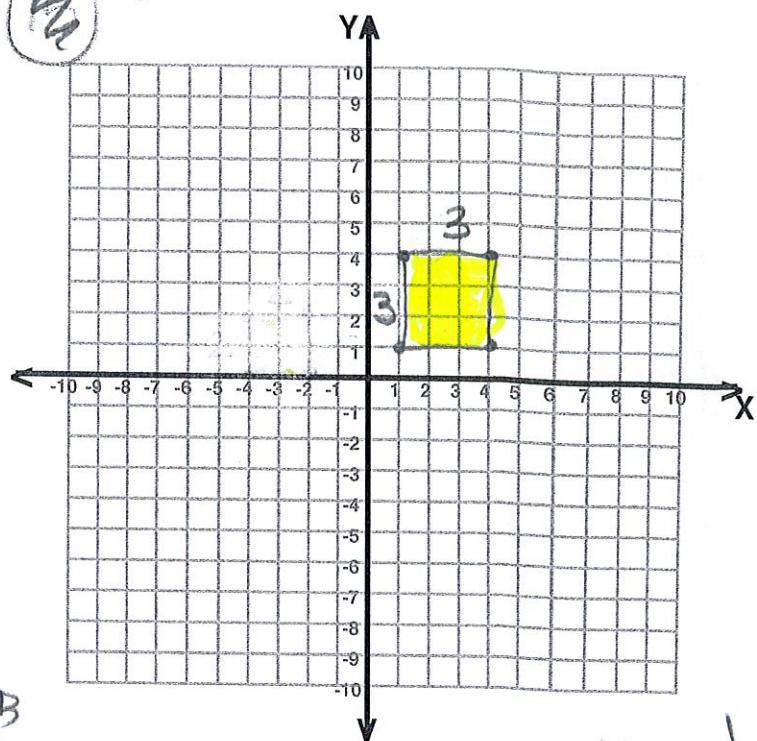
~~6D~~



7A



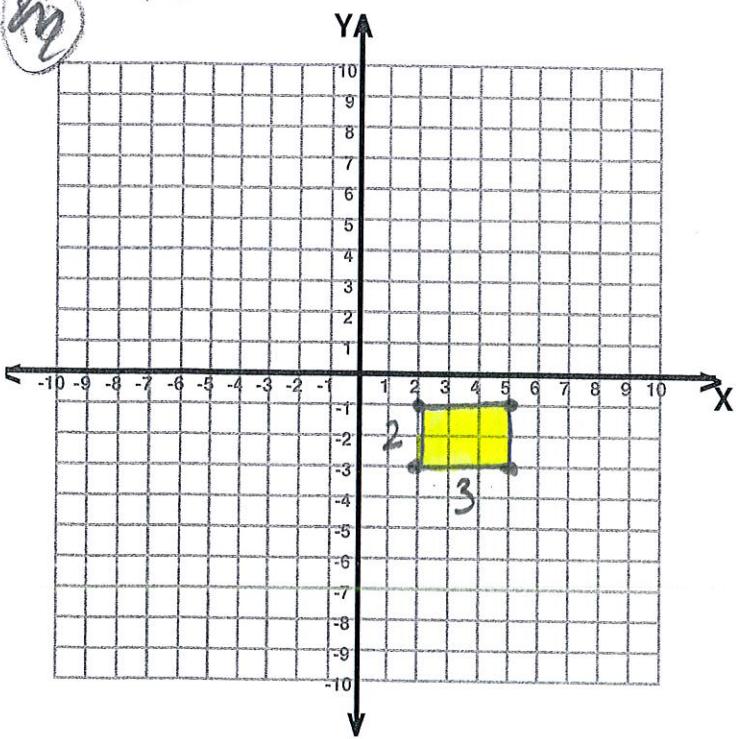
7B



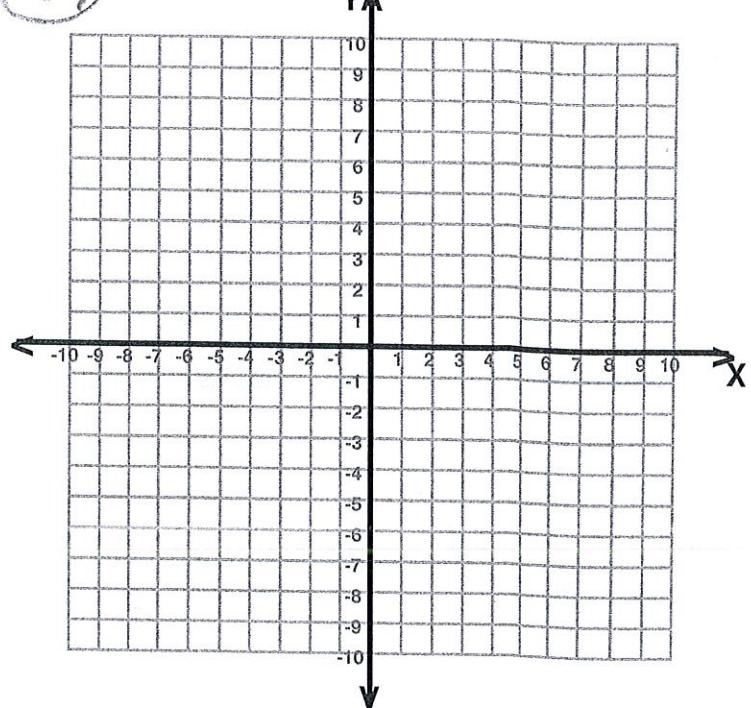
~~A + B = 2 + 3 = 5~~

A + B are similar!

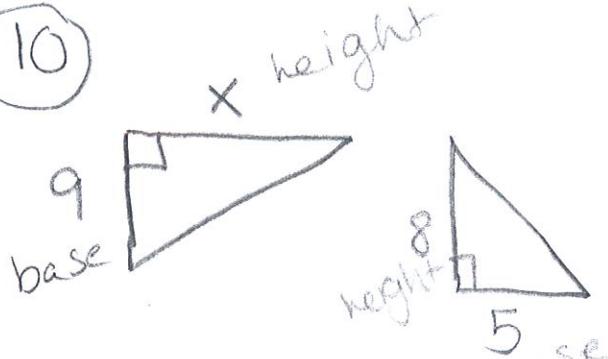
7C



45



(10)

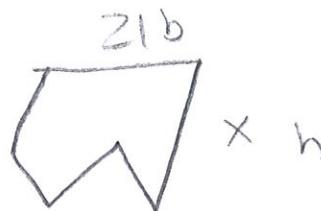
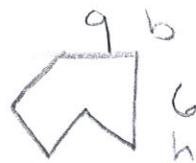


$$\frac{b}{h} \frac{9}{x} = \frac{5}{8}$$

$$5x = 72$$

$$x = 14.4$$

(11)

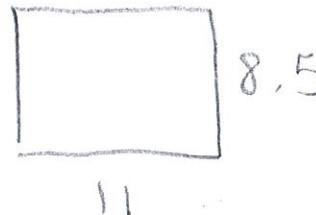


$$\frac{b}{h} \frac{9}{6} = \frac{21}{x}$$

$$9x = 126$$

$$x = 14$$

(12)



$$\frac{L}{W} \frac{63}{36} = \frac{8.5}{11}$$

$$693$$

not similar

(13)

$$\frac{L}{W} \frac{30}{18} = \frac{50}{x}$$

$$\frac{30x}{30} = \frac{900}{30}$$

 $x = 30$ inches wide

(14) a) sometimes, depends on measurements

b) always, same side lengths all around

c) sometimes, depends on measurements

d) never, diff shapes

(16)

a) yes, each side is increased by the same factor

- Test out ^{random} numbers to try



enlarge
by
20%.



~~$$\begin{array}{r} 240 \\ 10 \\ \hline 20 \end{array} \quad \begin{array}{r} 240 \\ 12 \\ \hline 24 \end{array}$$~~

b)



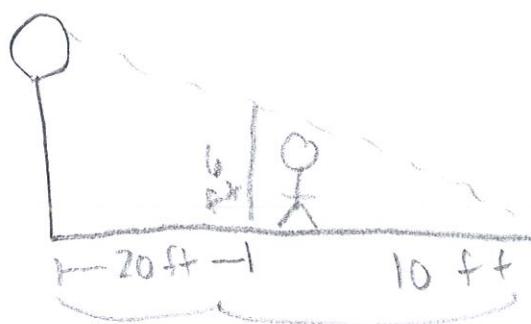
→
add 6
to
both
dimensions



~~$$\begin{array}{r} 260 \\ 10 \\ \hline 20 \end{array} \quad \begin{array}{r} 320 \\ 16 \\ \hline 26 \end{array}$$~~

No:

(17)



factor in distance ×
shadow

First triangle 30 ft

~~$$\frac{H}{L} = \frac{6}{10}$$~~

$$10x = 180$$

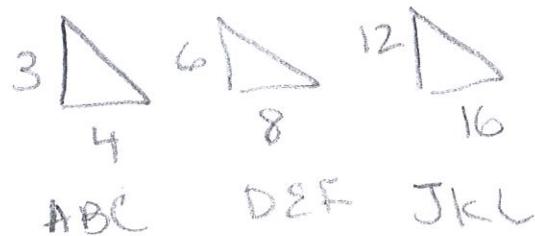
$$x = 18$$

18 is three times

taller than the person's height

⑯ yes, a scale is a ratio applied to each length
and you use the same length each time.

⑰ Yes, create random triangles!



A handwritten note shows the ratios $\frac{3}{4}$ and $\frac{12}{16}$ crossed out with a large circle containing a question mark. Above this, the number 48 is written twice, once next to each crossed-out fraction.

