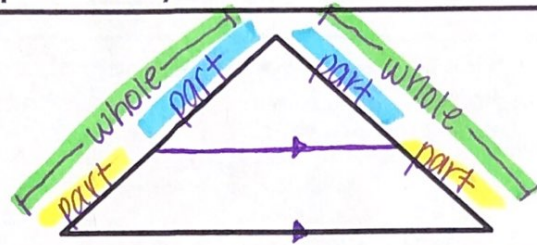


Name: \_\_\_\_\_ Date: \_\_\_\_\_

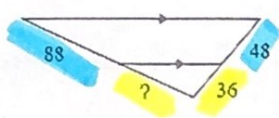
### Triangle Proportionality

If a line parallel to one side of a triangle intersects the other two sides of the triangle, then the line divides these two sides proportionally.



Solve for x:

1.



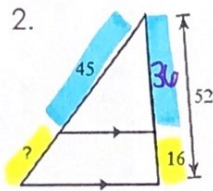
$$\frac{88}{x} = \frac{48}{36}$$

$$48x = 3168$$

$$\frac{48x}{48} = \frac{3168}{48}$$

$$x = 66$$

2.

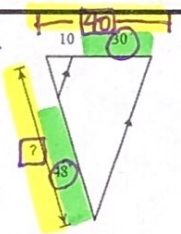


$$\frac{45}{x} = \frac{36}{16}$$

$$36x = 720$$

$$x = 20$$

3.

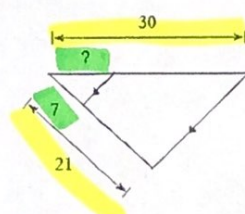


$$\frac{x}{48} = \frac{40}{30}$$

$$1920 = 30x$$

$$x = 64$$

4.

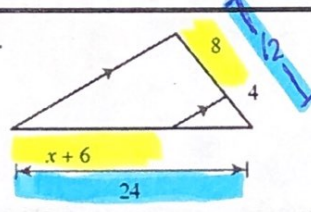


$$\frac{x}{30} = \frac{7}{21}$$

$$\frac{210}{21} = \frac{21x}{21}$$

$$x = 10$$

5.



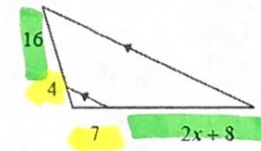
~~$$\frac{12}{8} = \frac{24}{x+6}$$~~

$$192 = 12x + 72$$

$$120 = 12x$$

$$x = 10$$

6.



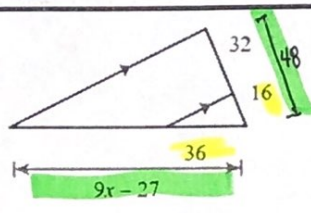
$$\frac{16}{4} = \frac{2x+8}{7}$$

$$8x+32 = 112$$

$$8x = 80$$

$$x = 10$$

7.



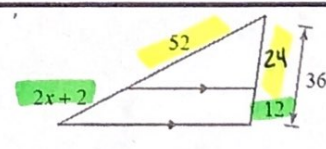
$$\frac{16}{48} = \frac{36}{9x-27}$$

$$1728 = 144x - 432$$

$$2160 = 144x$$

$$x = 15$$

8.



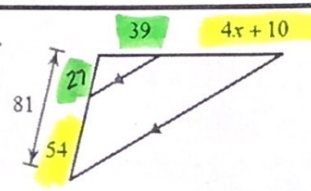
$$\frac{52}{2x+2} = \frac{24}{12}$$

$$48x+48 = 624$$

$$48x = 576$$

$$x = 12$$

9.



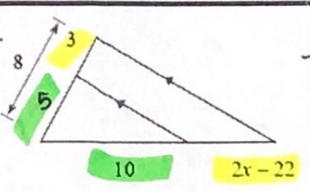
$$\frac{27}{54} = \frac{39}{4x+10}$$

$$2106 = 108x + 270$$

$$1836 = 108x$$

$$x = 17$$

10.



$$\frac{5}{3} = \frac{10}{2x-22}$$

$$30 = 10x - 110$$

$$140 = 10x$$

$$x = 14$$