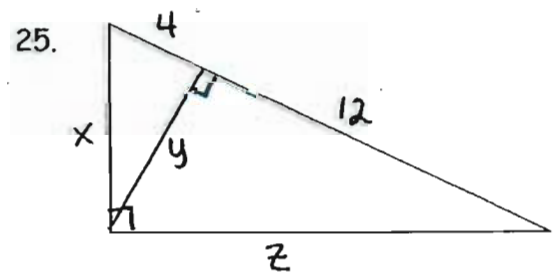
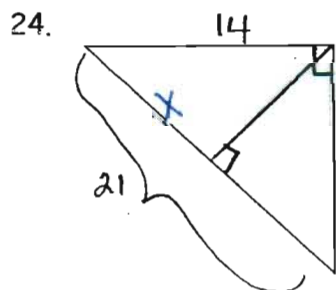
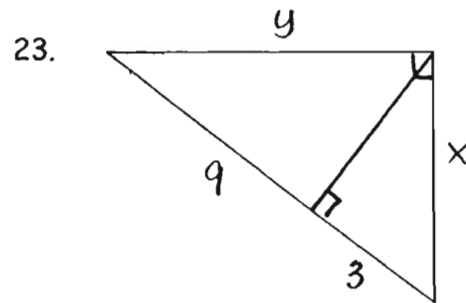
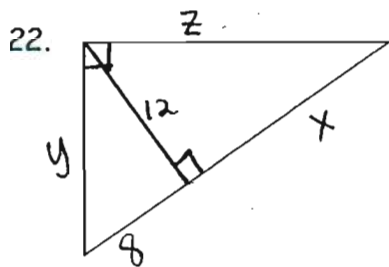
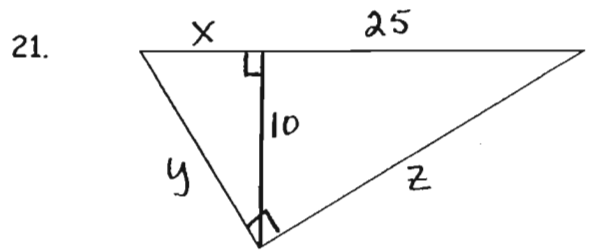
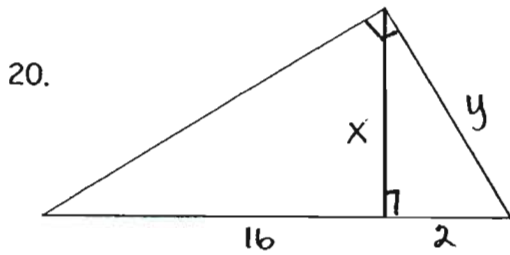
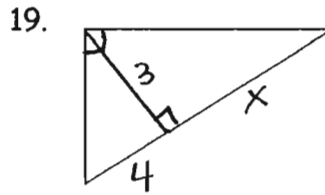
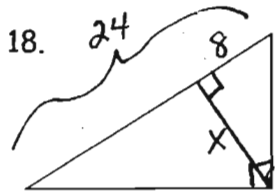
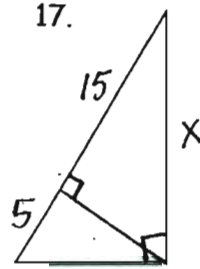
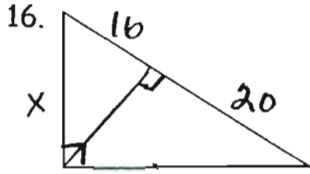
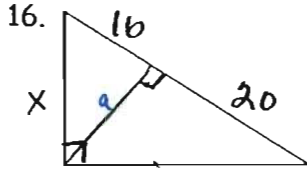


Part 3: Determine the value of the variables in the triangles below.



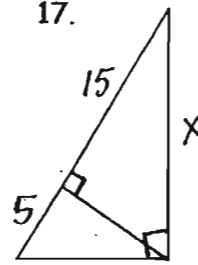
Part 3: Determine the value of the variables in the triangles below.



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

$$x^2 = 576$$

$$x = 24$$

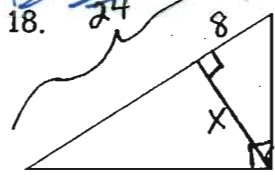


$$\frac{15}{x} = \frac{x}{20}$$

$$x^2 = 300$$

$$x = 10\sqrt{3}$$

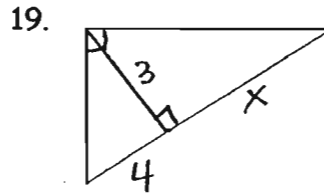
~~sides
m
n
A 16
20
x
?~~



$$\frac{8}{x} = \frac{x}{16}$$

$$x^2 = 128$$

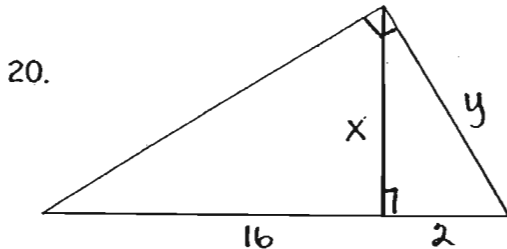
$$x = 8\sqrt{2}$$



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

$$4x = 9$$

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



$$\frac{16}{x} = \frac{x}{z}$$

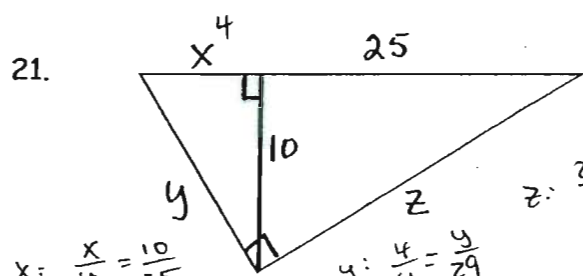
$$x^2 = 32$$

$$x = 4\sqrt{2}$$

$$\frac{z}{y} = \frac{y}{18}$$

$$y^2 = 36$$

$$y = 6$$



$$x = \frac{10}{16} = \frac{10}{25}$$

$$25x = 100$$

$$x = 4$$

$$z = \frac{25}{z} = \frac{z}{29}$$

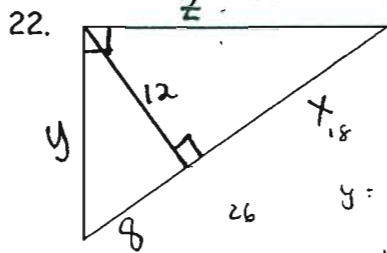
$$z^2 = 725$$

$$z = 5\sqrt{29}$$

$$y = \frac{4}{y} = \frac{y}{29}$$

$$y^2 = 116$$

$$y = 2\sqrt{29}$$



$$x = \frac{8}{12} = \frac{12}{x}$$

$$8x = 144$$

$$x = 18$$

$$y = \frac{8}{y} = \frac{y}{26}$$

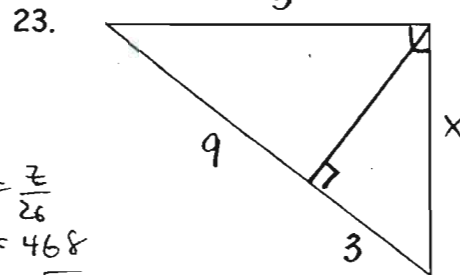
$$y^2 = 208$$

$$y = 4\sqrt{13}$$

$$z = \frac{18}{z} = \frac{z}{26}$$

$$z^2 = 468$$

$$z = 6\sqrt{13}$$



$$\frac{3}{x} = \frac{x}{12}$$

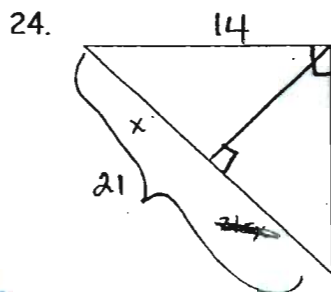
$$x^2 = 36$$

$$x = 6$$

$$\frac{9}{y} = \frac{y}{12}$$

$$y^2 = 108$$

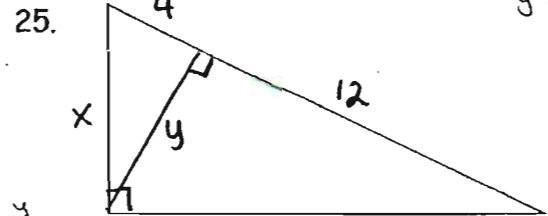
$$y = 6\sqrt{3}$$



$$\frac{x}{14} = \frac{14}{21}$$

$$21x = 196$$

$$x = \frac{28}{3}$$



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

$$y^2 = 48$$

$$y = 4\sqrt{3}$$

$$x = \frac{4}{x} = \frac{x}{16}$$

$$x^2 = 64$$

$$x = 8$$

$$z = \frac{12}{z} = \frac{z}{16}$$

$$z^2 = 192$$

$$z = 8\sqrt{3}$$

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