

# Warm-Up



$$\text{a) } \frac{2}{5} = \frac{x}{12} \quad \frac{x}{12} = \frac{2}{5}$$

$$\frac{24}{5} = x$$

$$4.8 = x$$

$$\text{b) } \frac{x}{5} = \frac{10}{3}$$

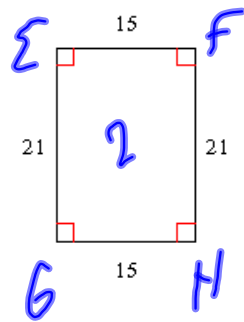
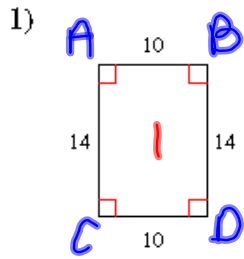
$$x = \frac{50}{3}$$

$$x = 16.\bar{6}$$

$$\text{c) } \frac{7}{9} = \frac{x}{4}$$

$$\frac{28}{9} = x$$

$$3.\bar{1} = x$$

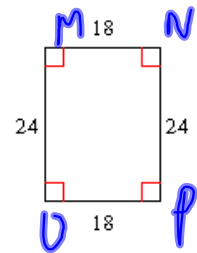
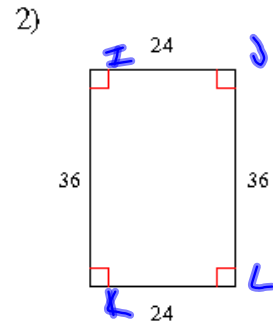


$ABDC \sim EFGH$

$$\frac{AB}{EF} = \frac{BD}{FH} = \frac{DC}{HG} = \frac{AC}{EG}$$

$$\frac{10}{15} = \frac{14}{21} = \frac{10}{15} = \frac{14}{21}$$

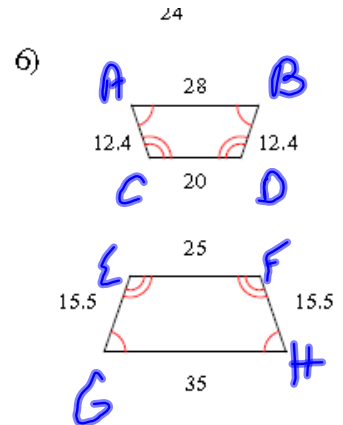
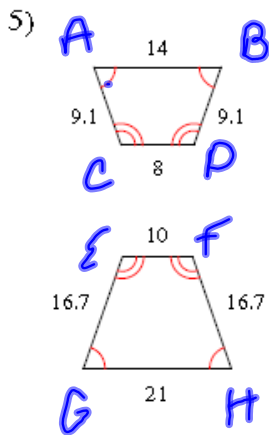
$$0.\bar{6} = 0.\bar{6}$$



$$\frac{IJ}{MN} = \frac{JK}{NP}$$

$$\frac{24}{18} = \frac{36}{24}$$

$$1.\bar{3} \neq 1.5 \quad \text{Not}$$



$$\frac{AB}{GH} = \frac{BC}{EH} = \frac{CD}{EF}$$

$$\frac{14}{21} = \frac{9.1}{16.7} = \frac{8}{10}$$

0.6 ~~6~~ 0.54      Not

$$\frac{AB}{GH} = \frac{BC}{EH} = \frac{CD}{EF}$$

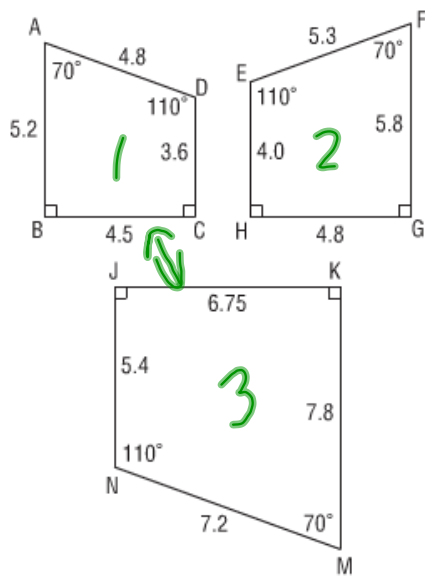
$$\frac{28}{35} = \frac{12.4}{15.5} = \frac{20}{25}$$

0.8 = 0.8 = 0.8



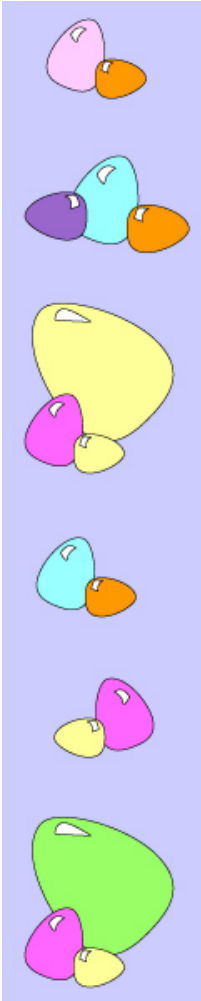
These quadrilaterals have corresponding angles equal.

$\frac{AD}{FE}$



$ABCD \sim MKJN$

a) Are any of these quadrilaterals similar? Justify your answer.

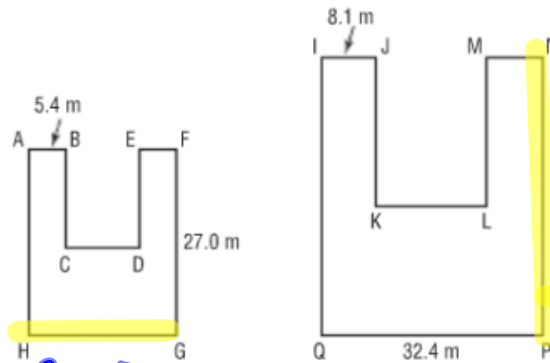


A. Calculate the length of GH

B. Calculate the length of NP

List the ratio of corresponding sides!!!

\* These polygons are similar!



? [x]

? [y]

$$\frac{AB}{IJ} = \frac{FG}{NP} = \frac{HG}{QP}$$

$$\frac{5.4}{8.1} = \frac{27}{NP} = \frac{HG}{32.4}$$

0.6            0.6            0.6

5.4 = ~~x~~ / 32.4

5.4 = ~~x~~ / 32.4

5.4 = ~~x~~ / 32.4

x = 21.6

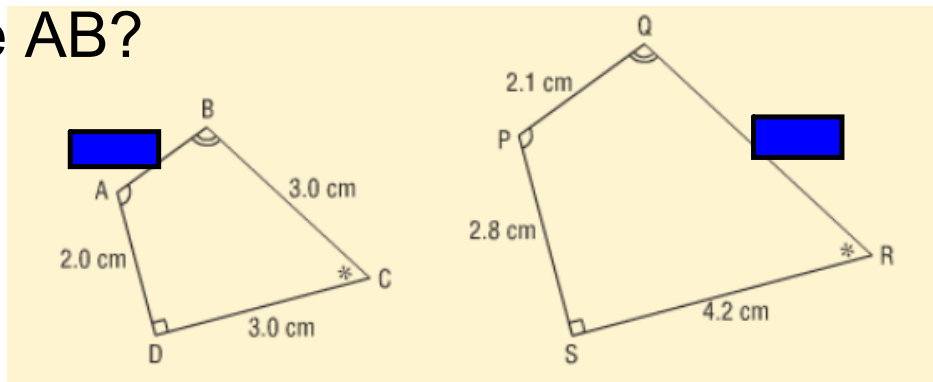
(27) 8.1 = NP (27)

5.4 = 27

x = 40.5

Find side QR?

Find side AB?



$$\frac{AB}{PQ} = \frac{AD}{PS} = \frac{BC}{QR} = \frac{DC}{SR}$$

$$\frac{AB}{2.1} = \frac{2}{2.8} = \frac{3}{QR} = \frac{3}{4.2}$$

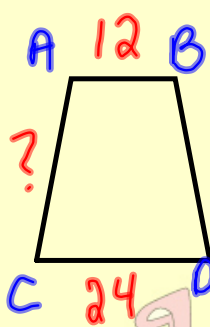
$\frac{AB}{2.1} = \frac{2}{2.8}$  (2.1)  $\frac{2}{2.8}$  (2.1)  $\frac{2}{2.8} = 0.71428$   
 $AB = 1.5$

$\frac{3}{QR} = \frac{3}{4.2}$   $\frac{3}{QR} = 0.71428$   
 $QR = 4.2$



# Homework

## Worksheet questions



1-6,

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