

Practice Quiz: Proportions #1

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Solve each proportion.

1) $\frac{4}{m} = \frac{3}{2}$

2) $\frac{9}{n} = \frac{10}{5}$

3) $\frac{5}{8} = \frac{p}{10}$

4) $\frac{3}{6} = \frac{4}{x}$

5) $\frac{10}{r-10} = \frac{8}{6}$

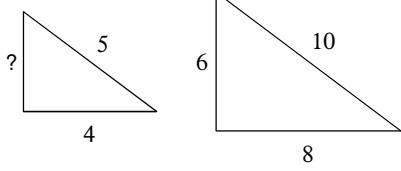
6) $\frac{6}{4} = \frac{2}{b-8}$

7) $\frac{6}{n-4} = \frac{9}{8}$

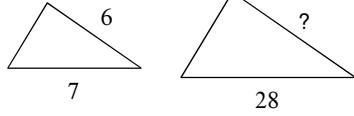
8) $\frac{5}{4} = \frac{x+7}{2}$

The polygons in each pair are similar. Find the missing side length.

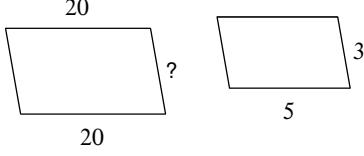
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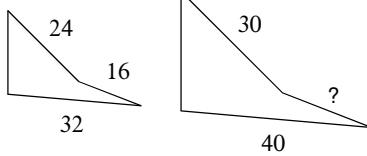
10)



11)

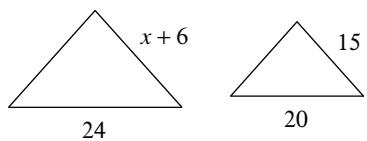


12)

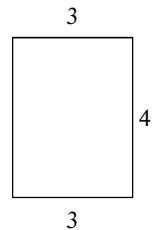


Solve for x . The polygons in each pair are similar.

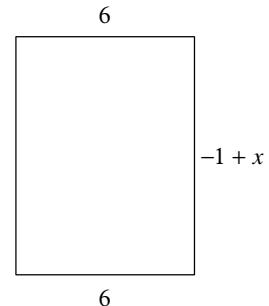
13)



14)

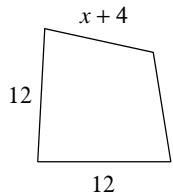


3

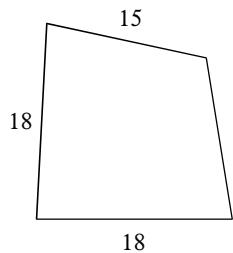
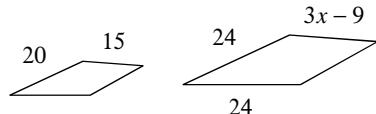


6

15)

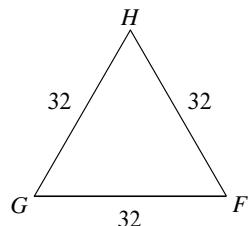
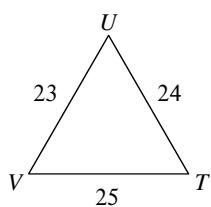


16)



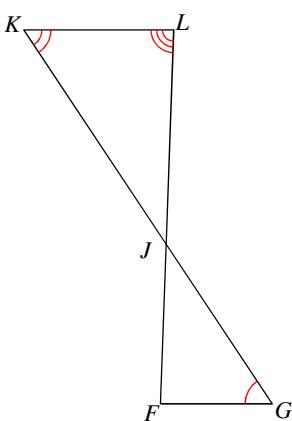
State if the triangles in each pair are similar. If so, state how you know they are similar and complete the similarity statement.

17)



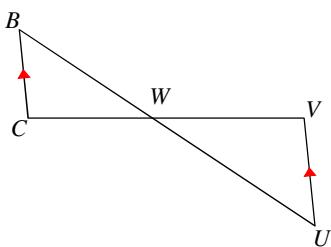
$$\Delta HGF \sim \underline{\hspace{2cm}}$$

18)



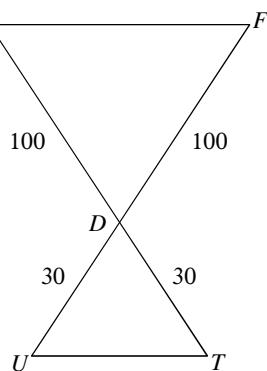
$$\Delta JKL \sim \underline{\hspace{2cm}}$$

19)



$$\Delta WVU \sim \underline{\hspace{2cm}}$$

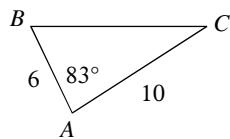
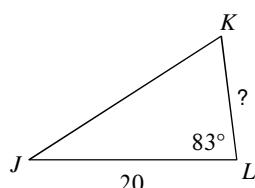
20)



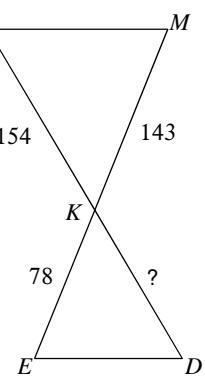
$$\Delta DEF \sim \underline{\hspace{2cm}}$$

Find the missing length. The triangles in each pair are similar.

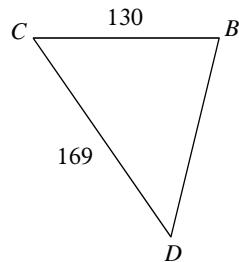
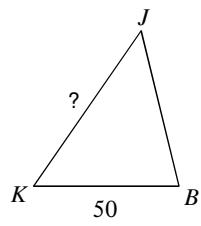
21)



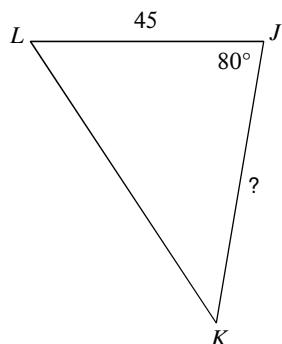
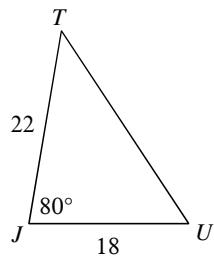
22)



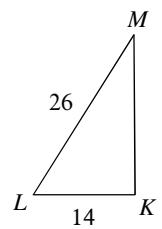
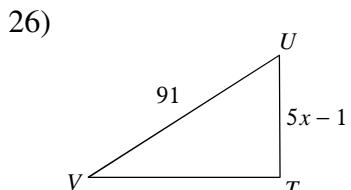
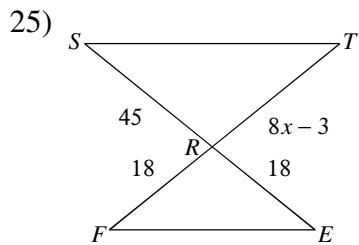
23)



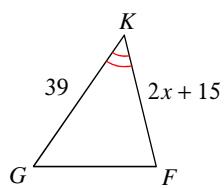
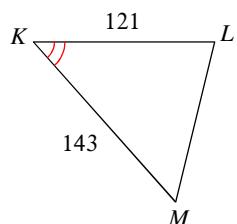
24)



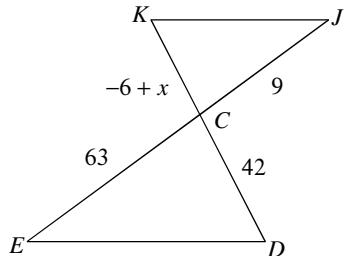
Solve for x . The triangles in each pair are similar.



27)



28)



Answers to Practice Quiz: Proportions #1

- | | | | |
|---|-----------------|--|---------------|
| 1) $\{2.66\}$ | 2) $\{4.5\}$ | 3) $\{6.25\}$ | 4) $\{8\}$ |
| 5) $\{17.5\}$ | 6) $\{9.33\}$ | 7) $\{9.33\}$ | 8) $\{-4.5\}$ |
| 9) 3 | 10) 24 | 11) 12 | 12) 20 |
| 13) 12 | 14) 9 | 15) 6 | 16) 9 |
| 17) not similar | 18) not similar | 19) similar; AA similarity; ΔWCB | |
| 20) similar; SAS similarity; ΔDTU | | 21) 12 | 22) 84 |
| 23) 65 | 24) 55 | 25) 6 | 26) 10 |
| 27) 9 | 28) 12 | | |