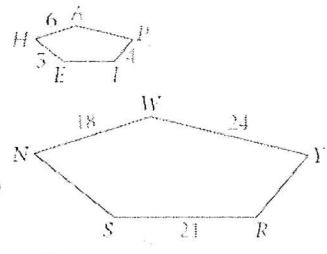


Geometry Similarity - Individual Practice

All measurements are in centimeters.

1. HAPIE ~ NIVYRS

- AP = 8 cm
- EI = 7 cm
- SN = 15 cm
- YR = 12 cm

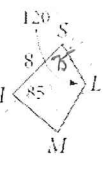


together

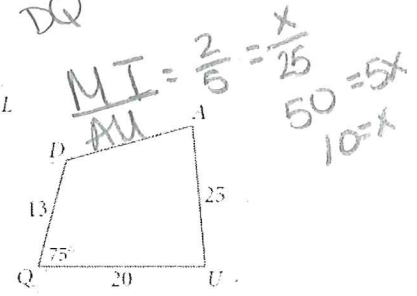
$\frac{HA}{NW} = \frac{6\text{cm}}{18\text{cm}} = \frac{1}{3}$
 $SLR = \frac{1}{3}$
 $\frac{1}{3} = \frac{AP}{NY}$

2. QUAD ~ SIML

- SL = 26/5 cm
- MI = 10 cm
- m∠D = 120°
- m∠U = 85°
- m∠A = 80°



$\frac{SL}{DQ} = \frac{2}{5} = \frac{x}{13} \rightarrow 26 = 5x$
 $\frac{26}{5} = x$

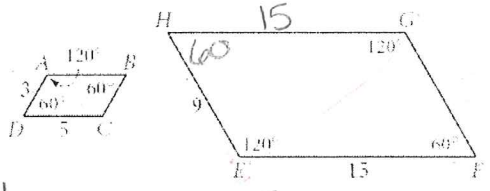


$\frac{SI}{QU} = \frac{8\text{cm}}{20\text{cm}} = \frac{2}{5}$

$75 + 85 + 120 = 280$
 $260 - 280 = 80$

In Exercises 3-6, decide whether or not the figures are similar. Explain why or why not.

3. ABCD and EFGH

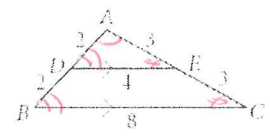


$\frac{AD}{EH} = \frac{3}{9} = \frac{1}{3}$

$\frac{DC}{EF} = \frac{5}{15} = \frac{1}{3}$

Yes - Corresponding ∠s ≅
 Corresponding sides proportional

4. ΔABC and ΔADE



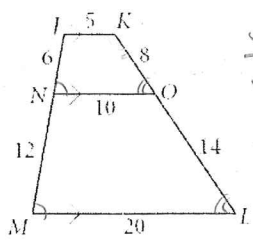
$\frac{AD}{AB} = \frac{2}{4} = \frac{1}{2}$

$\frac{AE}{AC} = \frac{3}{6} = \frac{1}{2}$

$\frac{DE}{BC} = \frac{4}{8} = \frac{1}{2}$

Yes? do you need ∠s also?

5. JKON and JKLM



$\frac{JK}{JK} = \frac{5}{5} = 1$

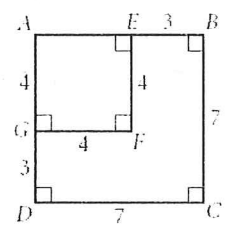
$\frac{JN}{JM} = \frac{6}{18} = \frac{1}{3}$

$\frac{KO}{KL} = \frac{8}{22} = \frac{4}{11}$

$\frac{ON}{LM} = \frac{10}{20} = \frac{1}{2}$

No - the SLR is not the same for corresponding sides

6. ABCD and AEGF



$\frac{AG}{AD} = \frac{4}{7}$

$\frac{EF}{BC} = \frac{4}{7}$

$\frac{GF}{DC} = \frac{4}{7}$

Yes - Corresponding sides are proportional

SLR = Corresponding ∠s ≅