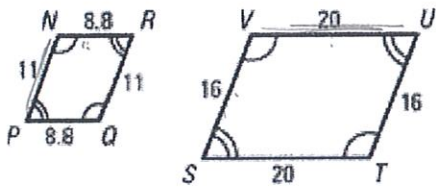


Ch 6 Questions

Determine if the polygons are similar. If so, write a similarity statement & find the scale factor.

44)

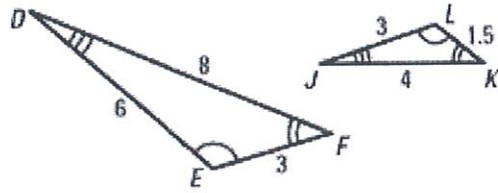


$$\frac{8.8}{16} = 0.55$$

$$\frac{11}{20} = 0.55$$

Quad NRQP ~ Quad. VSTU

45)



$$\frac{1.5}{3} = 0.5 \quad \frac{3}{6} = 0.5 \quad \frac{4}{8} = 0.5$$

$\Delta DEF \sim \Delta JKL$ SF = $\frac{1}{2}$

46) In the diagram $\Delta PQR \sim \Delta LMN$.

a) Find the scale factor of ΔPQR to ΔLMN

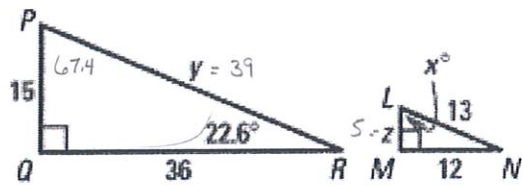
$$\frac{36}{12} = \frac{3}{1}$$

b) Find the values of x, y and z.

$$180 - 90 - 22.6 = 67.4 = x$$

$$\frac{36}{12} = \frac{y}{13} \Rightarrow 39 = y$$

$$\frac{36}{12} = \frac{z}{5} \Rightarrow z = 15$$



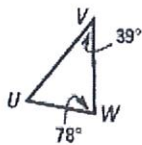
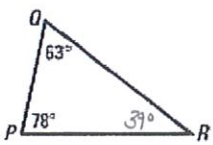
c) Find the perimeter of each triangle.

$$P_{\Delta PQR} = 90$$

$$P_{\Delta LMN} = 30$$

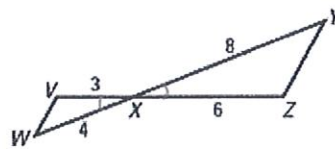
Show that the triangles are similar and write a similarity statement. Explain. (6.3-6.5)

47)



$\Delta PQR \sim \Delta UWV$
by AA~

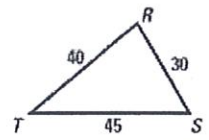
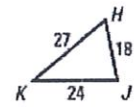
48)



$$\frac{3}{6} = \frac{4}{8} = \frac{1}{2}$$

$\Delta VWX \sim \Delta ZXY$
by SAS~

49)



$$\frac{24}{40} = 0.6$$

$$\frac{27}{45} = 0.6$$

$$\frac{18}{30} = 0.6$$

$\Delta KJH \sim \Delta TSR$
by SSS~