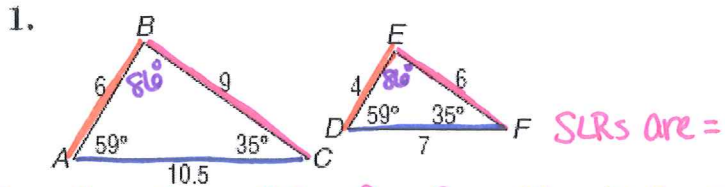


Name: \_\_\_\_\_

## 7.1 and 7.2 Homework

Determine whether each pair of figures is similar. Justify your answer.

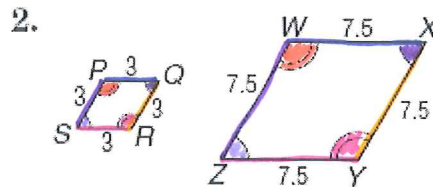


SLRs are =

$$\frac{AB}{DE} = \frac{6}{4} = \frac{3}{2} \quad \frac{BC}{EF} = \frac{9}{6} = \frac{3}{2} \quad \frac{AC}{DF} = \frac{10.5}{7} = \frac{3}{2}$$

$$\angle A \cong \angle D \quad \angle B \cong \angle E \quad \angle C \cong \angle F$$

Yes,  $\triangle ABC \sim \triangle DEF$  because SLR are = and corr.  $\angle$ s are  $\cong$



$$\frac{SP}{ZW} = \frac{3}{7.5} = \frac{2}{5}$$

$$\frac{QR}{XY} = \frac{3}{7.5} = \frac{2}{5}$$

$$\frac{SR}{ZY} = \frac{3}{7.5} = \frac{2}{5}$$

$$\frac{PQ}{WX} = \frac{3}{7.5} = \frac{2}{5}$$

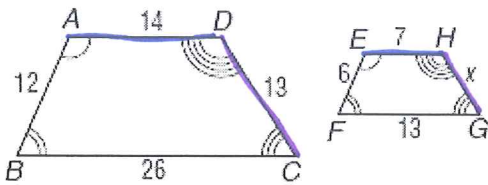
All SLRs are =

$$\angle P \cong \angle W, \angle Q \cong \angle X, \angle R \cong \angle Y, \angle S \cong \angle Z$$

Yes Rhombus SPQR  $\sim$  Rhombus ZWXY because all corr.  $\angle$ s are  $\cong$  and SLR =

- Write the similarity statement.
- Find the scale factor.
- Find x.
- Find the measure of the indicated side

3.  $\overline{GH}$



A. Quad ABCD  $\sim$  Quad EFGH

Scale factor: B. 2 or  $\frac{1}{2}$

C.  $x = \frac{13}{2}$

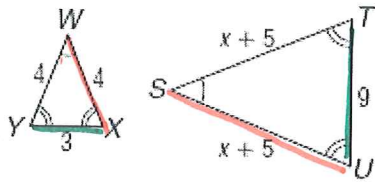
D. GH =  $\frac{13}{2}$

b)  $\frac{14}{7} = 2$  or  $\frac{1}{2}$

c)  $\frac{2}{1} = \frac{13}{x} \rightarrow 13 = 2x$   
 $x = \frac{13}{2}$  or 6.5

d)  $GH = x \leftarrow$  you just found this  $\smile$

4.  $\overline{ST}$  and  $\overline{SU}$



$$\frac{TU}{YX} = \frac{SU}{WX} \Rightarrow \frac{9}{3} = \frac{x+5}{4}$$

$$9 \cdot 4 = 3(x+5)$$

$$36 = 3x + 15$$

$$21 = 3x$$

$$\boxed{7 = x}$$

$$ST = 7 + 5 = 12$$

$$SU = 7 + 5 = 12$$

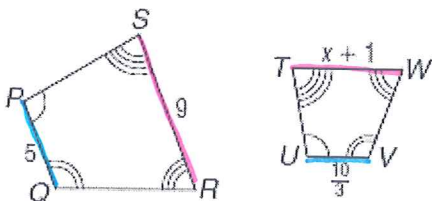
A.  $\underline{\Delta XYW \sim \Delta UTS}$

B.  $\underline{SF = \frac{1}{3} \text{ or } 3}$

C.  $\underline{X = 7}$

D.  $ST = \underline{12} \quad SU = \underline{12}$

5.  $\overline{WT}$



$$\frac{PQ}{UV} = \frac{SR}{TW}$$

$$\frac{5}{\left(\frac{10}{3}\right)} = \frac{9}{(x+1)}$$

$$5(x+1) = \frac{10}{3} \cdot 9$$

$$5x + 5 = 30$$

$$5x = 25$$

$$\boxed{x = 5}$$

$$WT = 5 + 1$$

$$\boxed{WT = 6}$$

A.  $\underline{PQRS \sim UVWT}$

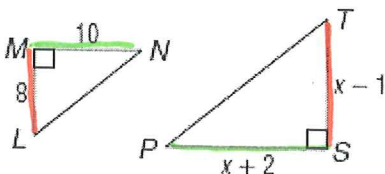
B.  $\underline{SF = \frac{3}{2} \text{ or } \frac{2}{3}}$   
must find x 1st

C.  $\underline{X = 5}$

D.  $WT = \underline{6}$

Just b/c there is a fraction, doesn't mean it is a word question!! Just do it!!

6.  $\overline{TS}$  and  $\overline{SP}$



$$\frac{ML}{ST} = \frac{MN}{PS}$$

$$\frac{8}{x-1} = \frac{10}{x+2}$$

$$8(x+2) = 10(x-1)$$

$$8x + 16 = 10x - 10$$

$$26 = 2x$$

$$\boxed{13 = x}$$

$$TS = 13 - 1$$

$$TS = 12$$

$$PS = 13 + 2$$

$$PS = 15$$

A.  $\underline{\Delta LMN \sim \Delta TSP}$

B.  $\underline{SF = \frac{2}{3} \text{ or } \frac{3}{2}}$   
Find x 1st

C.  $\underline{X = 13}$

D.  $TS = \underline{12} \quad SP = \underline{15}$