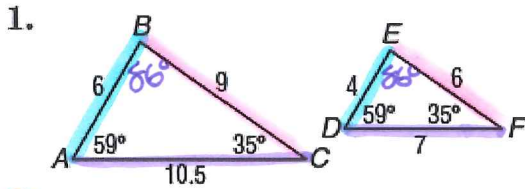


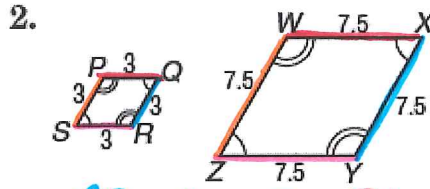
Name: key

7.1 and 7.2 Homework

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

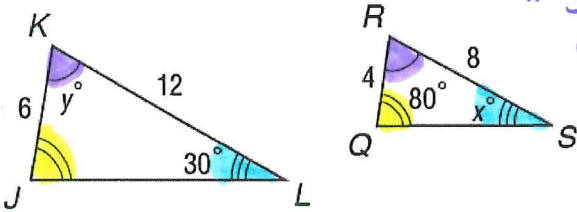


* SLRs are =
 $\frac{AC}{DF} = \frac{10.5}{7} = \frac{3}{2}$ $\frac{AB}{DE} = \frac{6}{4} = \frac{3}{2}$ $\frac{BC}{EF} = \frac{9}{6} = \frac{3}{2}$
 * $\angle A \cong \angle D$ $\angle C \cong \angle F$ $\angle B \cong \angle E$
 yes, $\triangle ABC \sim \triangle DFE$ because
 SLRs are = and corresponding
 \angle 's are \cong .



* All SLRs are =
 $\frac{PS}{WZ} = \frac{3}{7.5} = \frac{2}{5}$
 $\frac{SR}{ZY} = \frac{3}{7.5} = \frac{2}{5}$
 $\frac{QR}{XY} = \frac{3}{7.5} = \frac{2}{5}$ $\frac{PQ}{WX} = \frac{3}{7.5} = \frac{2}{5}$
 * $\angle S \cong \angle Z$, $\angle R \cong \angle Y$, $\angle Q \cong \angle X$, $\angle P \cong \angle W$
 yes, Rhombus SQQR \sim Rhombus ZWXY
 because all corresponding \angle 's are
 \cong and SLRs are =.

3. Given the two polygons are similar, find x and y.

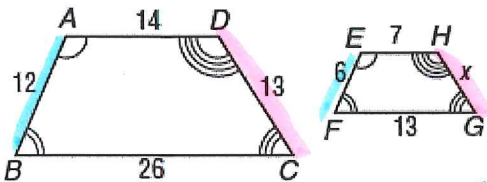


* Since we have similar \triangle 's we know all
 corresponding \angle 's are \cong .
 $\angle L \cong \angle S \rightarrow \boxed{30 = x}$
 Use \triangle Sum to find $\angle R$
 $80 + 30 + \angle R = 180$
 $\angle R = 70^\circ$
 $\angle K \cong \angle R \rightarrow \boxed{y = 70^\circ}$

Directions (#4-7):

- A. Write the similarity statement.
- B. Find the scale factor.
- C. Find x.
- D. Find the measure of the indicated side

4. \overline{GH}



B) $\frac{AB}{EF} = \frac{12}{6} = \boxed{2}$ or $\frac{EF}{AB} = \frac{6}{12} = \boxed{\frac{1}{2}}$

C) $\frac{AB}{EF} = \frac{DC}{HG} \rightarrow \frac{12}{6} = \frac{13}{x}$
 $x(12) = 78$
 $\boxed{x = 6.5}$

A. Quad ABCD \sim Quad EFGH

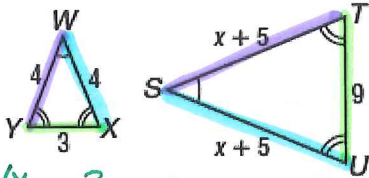
B. 2 or $\frac{1}{2}$

C. x = 6.5

D. GH = 6.5

* GH is x! *

5. \overline{ST} and \overline{SU}



B) $\frac{YX}{UT} = \frac{3}{9} = \frac{1}{3}$ or $\frac{UT}{YX} = \frac{9}{3} = 3$

$\frac{YW}{TS} = \frac{YX}{UT} \rightarrow \frac{4}{x+5} = \frac{3}{9}$

$3(x+5) = 36$
 $3x+15 = 36$

$x=7$

$ST = x+5$
 $= 7+5$
 $= 12$
 $SU = 7+5 = 12$

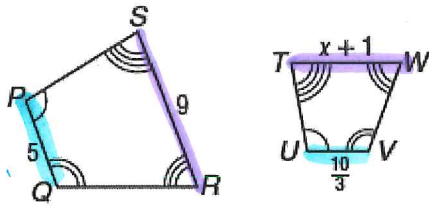
A. $\triangle WYX \sim \triangle TUS$

B. $\frac{1}{3}$ or 3

C. $x=7$

D. $ST=12$ $SU=12$

6. \overline{WT}



$\frac{PQ}{UV} = \frac{5}{10/3} = 5 \cdot \frac{3}{10} = \frac{15}{10} = \frac{3}{2}$

$\frac{PQ}{UV} = \frac{RS}{TW} \rightarrow \frac{5}{10/3} = \frac{9}{x+1} \rightarrow \frac{10}{3} \cdot 9 = 5(x+1)$
 $30 = 5x+5$
 $25 = 5x$
 $5 = x$

$WT = x+1$
 $= 5+1$
 $WT = 6$

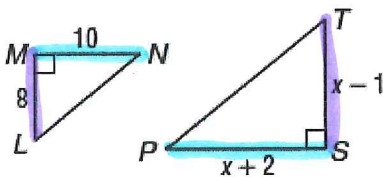
A. Quad PQRS \sim Quad UVWT

B. $SF = \frac{3}{2}$ or $\frac{2}{3}$

C. $x=5$

D. $WT=6$

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



* we must find x to find our SF *

$\frac{MN}{PS} = \frac{ML}{ST} \rightarrow \frac{10}{x+2} = \frac{8}{x-1}$

$\frac{ML}{ST} = \frac{8}{12} = \frac{2}{3}$

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

$8x+16 = 10x-10$

$26 = 2x$

$13 = x$

$TS = 13-1 = 12$
 $SP = 13+2 = 15$

A. $\triangle LMN \sim \triangle TSP$

B. $SF = \frac{2}{3}$ or $\frac{3}{2}$

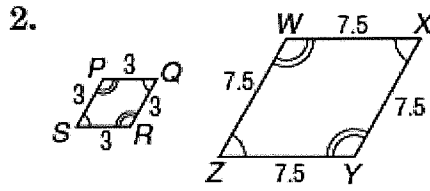
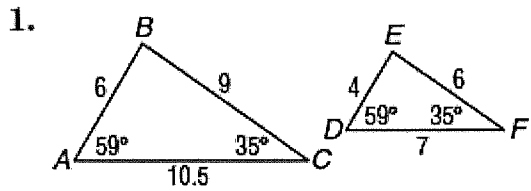
C. $x=13$

D. $TS=12$ $SP=15$

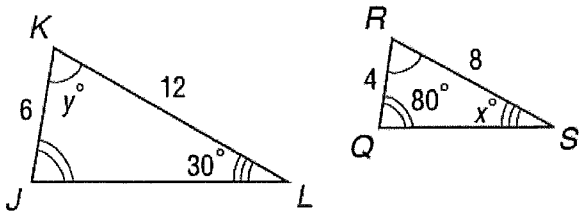
Name: _____

7.1 and 7.2 Homework

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



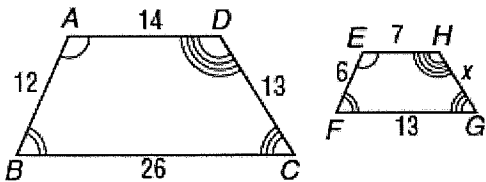
3. Given the two polygons are similar, find x and y .



Directions (#4-7):

- A. Write the similarity statement.
- B. Find the scale factor.
- C. Find x .
- D. Find the measure of the indicated side

4. \overline{GH}



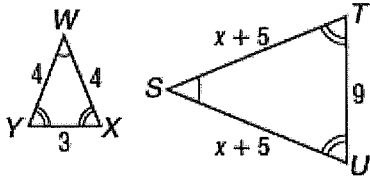
A. Quad ABCD _____

B. _____

C. _____

D. GH= _____

5. \overline{ST} and \overline{SU}



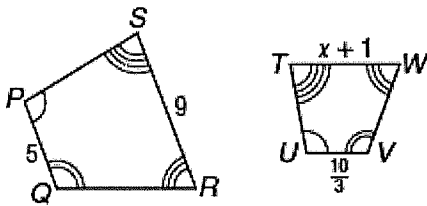
A. $\Delta XYW \sim$ _____

B. _____

C. _____

D. $ST =$ _____ $SU =$ _____

6. \overline{WT}



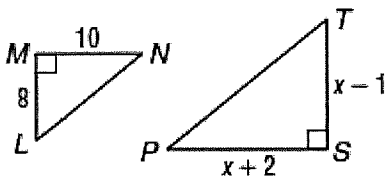
A. Quad PQRS \sim _____

B. _____

C. _____

D. $WT =$ _____

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



A. $\Delta LMN \sim$ _____

B. _____

C. _____

D. $TS =$ _____ $SP =$ _____