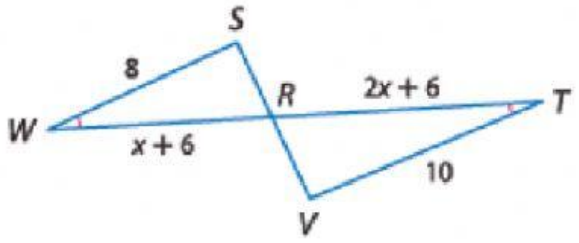
WORKSHEET LESSON 6-3

PARTS OF SIMILAR TRIANGLES

1) Prove that $\Delta WRS \sim \Delta TRV$. Then find WR and RT



Statement	Reason
$< W \cong <$	given
$< WRS \cong <$	Vertical angle theorem
$\Delta WRS \sim \Delta TRV$	similarity

Since triangles are similar, its sides are proportional

$\frac{WR}{\quad} = \frac{}{TV}$

$\frac{\quad}{2x+6} = \frac{8}{\quad}$

(x + 6) 10 = ( )

10 x + = 16 x +

-10x -10 x

60 = + 48

48 AA WS

TRV 10 T

TR X + 6 8

60 2X + 6 6X

12 = 6x (Subtract 48 on both sides)

$$\frac{12}{6} = \frac{6x}{\quad}$$

10 2

8 6

X =

Find the side lengths using the value of x

WR = x + 6

=

TR = 2x + 6

=