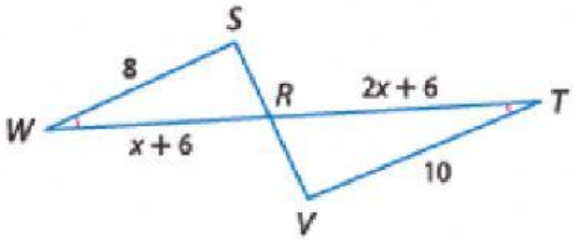
WORKSHEET LESSON 6-3

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

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

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

(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

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12 = 6x (Subtract 48 on both sides)

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

10 2

8 6

X =

Find the side lengths using the value of x

WR = x + 6

=

TR = 2x + 6

=

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