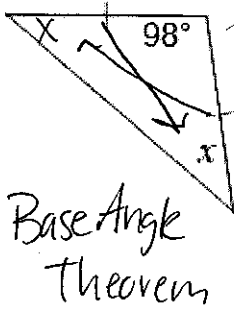


# Key

## Unit 3 Test Review

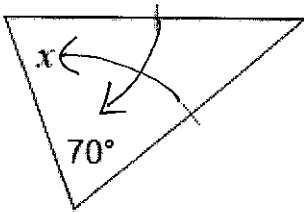
1. Solve for x:



$$\begin{aligned} x + x + 98 &= 180 \\ 2x + 98 &= 180 \\ -98 &-98 \\ \hline 2x &= 82 \\ \frac{2x}{2} &= \frac{82}{2} \end{aligned}$$

$$x = 41$$

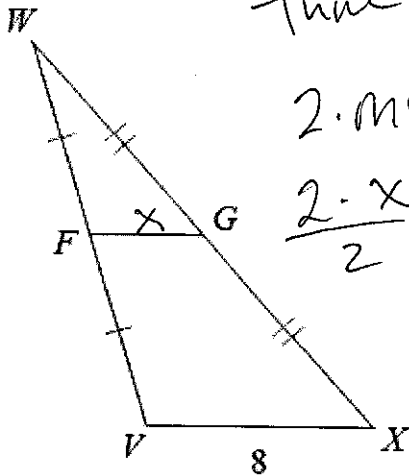
2. Solve for x:



$$x = 70^\circ$$

$$x = 70$$

3. Find  $\overline{FG}$



Mid-Segment  
Thm

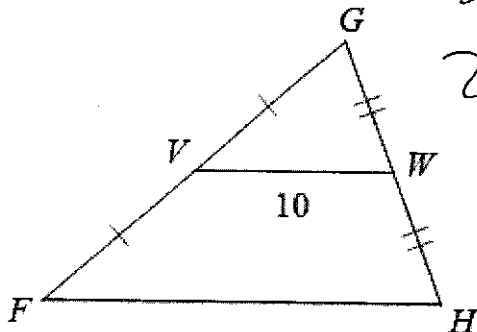
$$2 \cdot MS = \text{Base}$$

$$\frac{2 \cdot x}{2} = \frac{8}{2}$$

$$x = 4$$

$$\overline{FG} = 4$$

4. Find  $\overline{FH}$



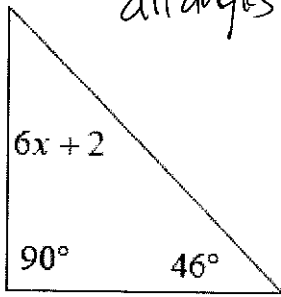
$$2 \cdot MS = \text{Base}$$

$$2 \cdot 10 = \underline{20}$$

$$\overline{FH} = 20$$

5. Solve for x

all angles add to  $180^\circ$



$$6x + 2 + 90 + 46 = 180$$

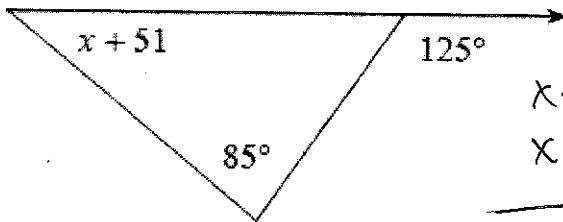
$$6x + 138 = 180$$

$$\begin{array}{r} 6x + 138 = 180 \\ -138 \quad -138 \\ \hline 6x = 42 \end{array}$$

$$x = 7$$

6. Solve for x

"Inside + Inside = Outside"



$$x + 51 + 85 = 125$$

$$x + 136 = 125$$

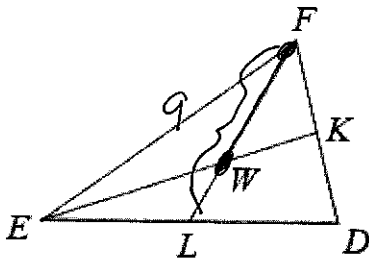
$$\begin{array}{r} x + 136 = 125 \\ -136 \quad -136 \\ \hline x = -11 \end{array}$$

$$x = -11$$

7. Find  $\overline{FW}$  if  $\overline{FL} = 9$

$2x$

$3x$



$$\frac{9}{3} = \frac{x}{2}$$

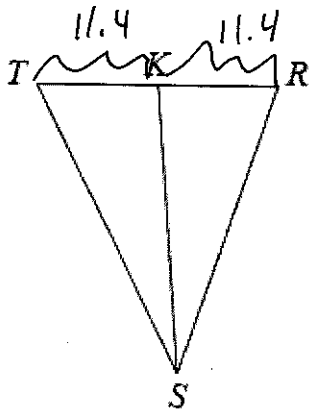
$$18 = 3x$$

$$x = 6$$

$$\overline{FW} = 6$$

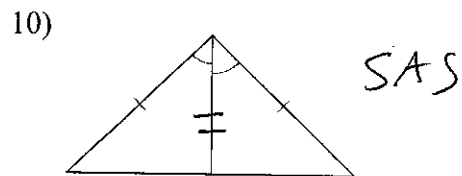
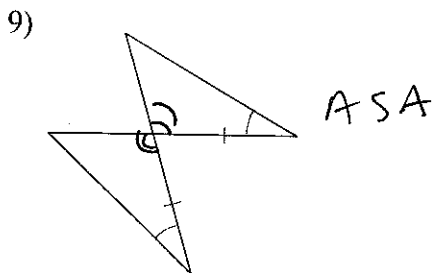
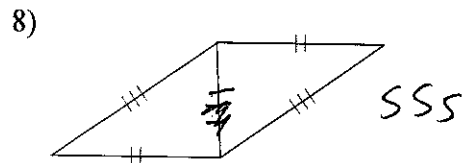
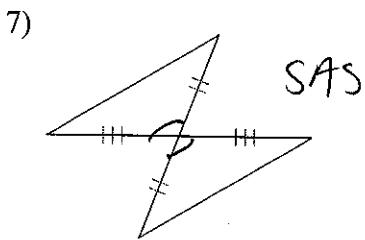
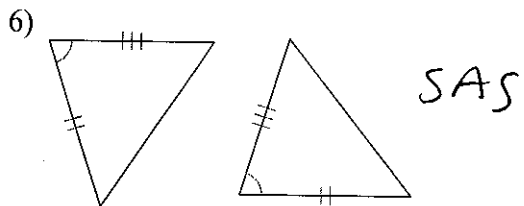
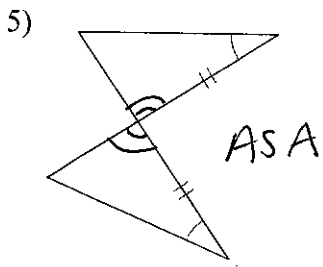
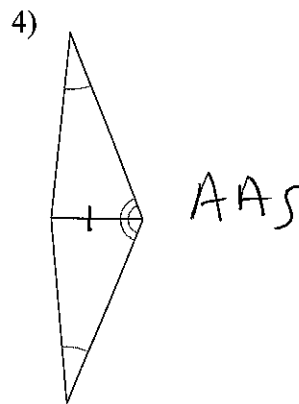
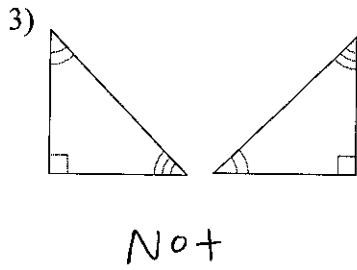
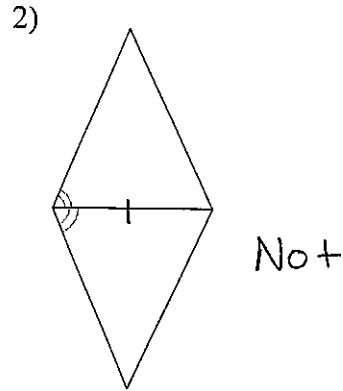
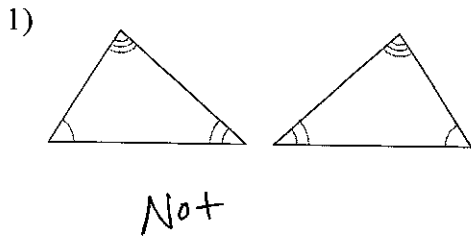
~~0~~

8. Find  $\overline{RT}$  if  $\overline{KT} = 11.4$

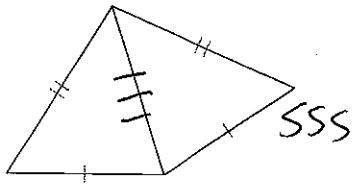


$$\overline{RT} = 22.8$$

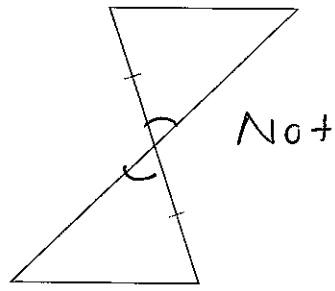
State if the two triangles are congruent. If they are, state how you know.



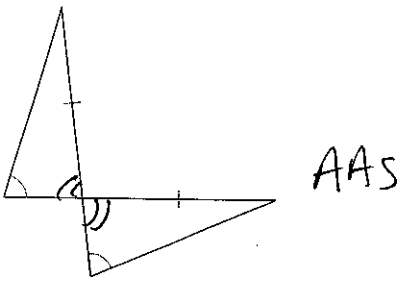
11)



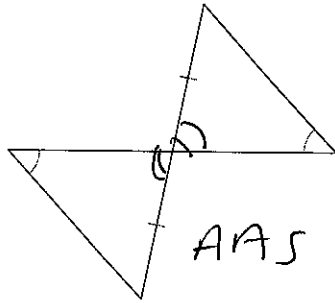
12)



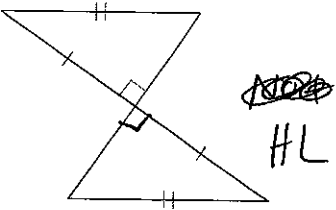
13)



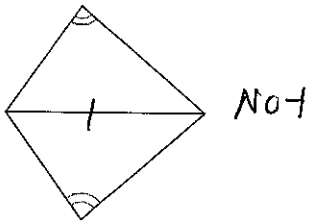
14)



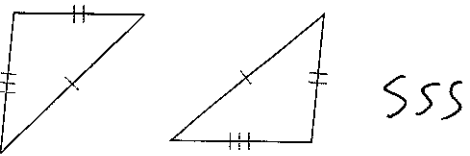
15)



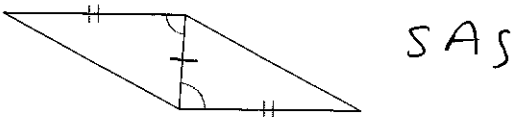
16)



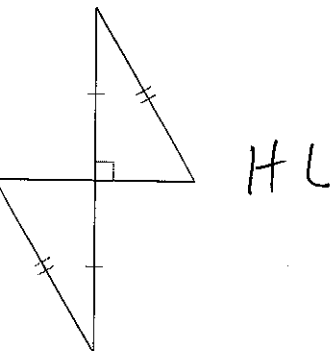
17)



18)



19)



20)

