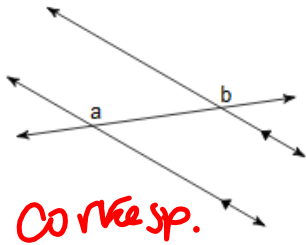


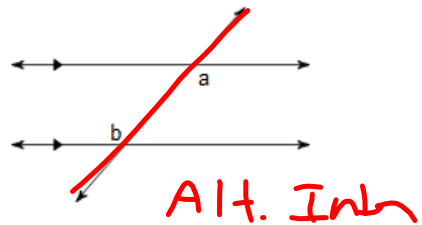
# Chapter 5 Review

Name the relationship: complementary, linear pair, vertical, adjacent, alternate interior, corresponding, or alternate exterior.

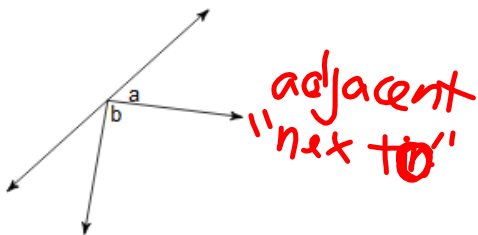
1)



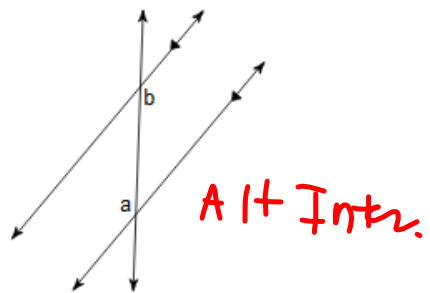
2)



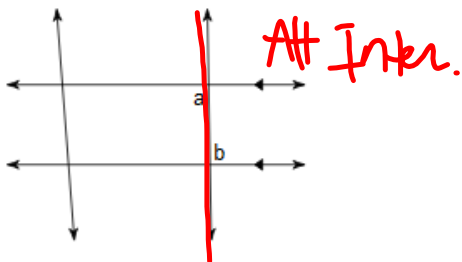
3)



4)

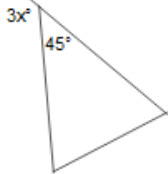


5)

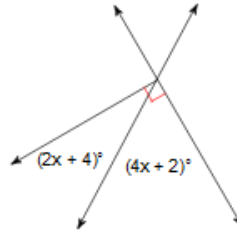


Find the value of x.

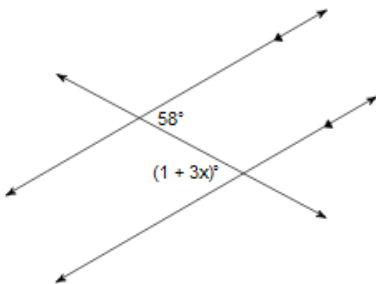
6)



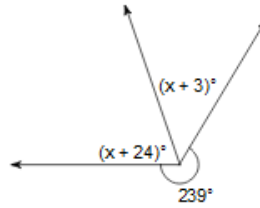
7)



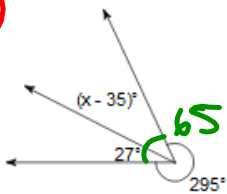
8)



9)



10)



$360 - 295$

$$x - 35 + 27 = 65$$

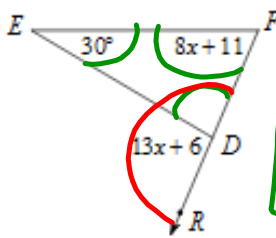
$$x - 8 = 65$$

$$+8 \quad +8$$

$$\boxed{x = 73}$$

Solve for  $x$ .

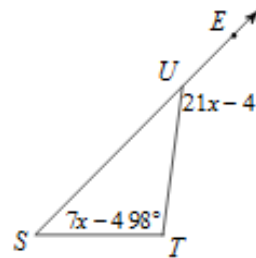
11)



proof:

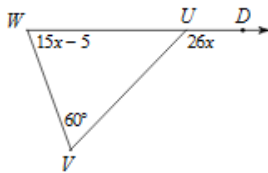
$$\begin{aligned}
 1 + 2 + 3 &= 180 \\
 3 + 4 &= 180 \\
 1 + 2 + 3 &= 3 + 4 \\
 \angle 1 + \angle 2 &= 4 \\
 \underline{30 + 8x + 11} &= \underline{13x + 6} \\
 41 - 6 &= 5x \\
 35 &= 5x \\
 \boxed{x = 7}
 \end{aligned}$$

12)



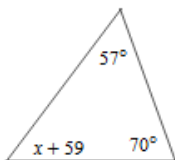
Find the measure of the angle indicated.

13) Find  $m\angle DUV$ .

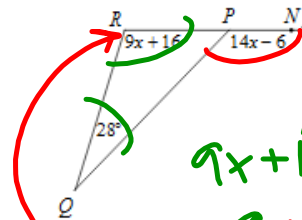


Solve for  $x$ .

15)



14) Find  $m\angle R$ .



$$9x + 16 + 28 = 14x - 6$$

$$\begin{array}{r} 9x + 44 = 14x - 6 \\ -9x \quad + 6 \quad -9x \quad + 6 \\ \hline 50 = 5x \end{array}$$

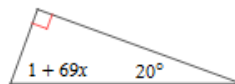
$$50 = 5x$$

$$x = 10$$

$$\begin{array}{r} 9(10) + 16 \\ 90 + 16 \\ \hline \end{array}$$

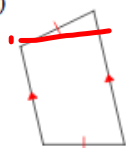
$$m\angle R = 106$$

16)



State the most specific name for each figure.

17)



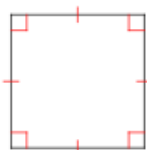
trap.

18)



parallelo.

19)



square

20)



trap.

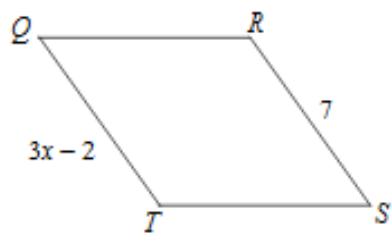
21)



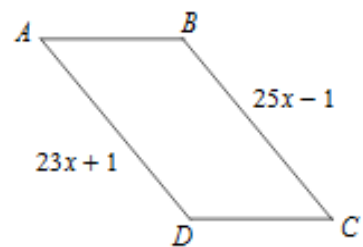
parallelogram

Solve for  $x$ . Each figure is a parallelogram.

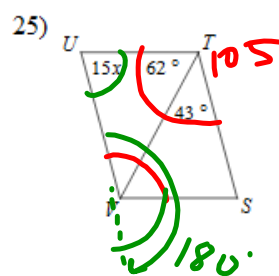
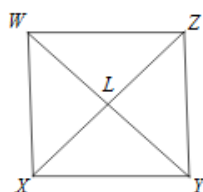
22)



23)



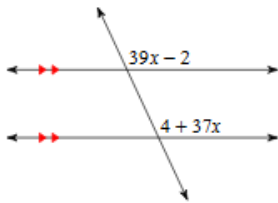
24)  $LW = 12$   
 $YW = 8x$



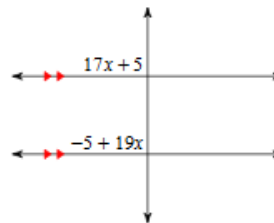
$$\begin{array}{r}
 15x + 105 = 180 \\
 -105 \quad -105 \\
 \hline
 15x = 75 \\
 \boxed{x = 5}
 \end{array}$$

Solve for  $x$ .

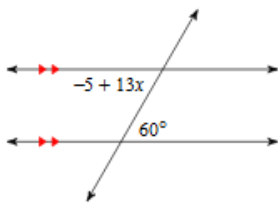
26)



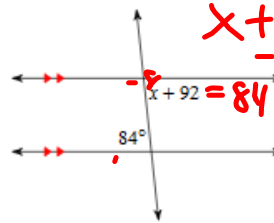
27)



28)



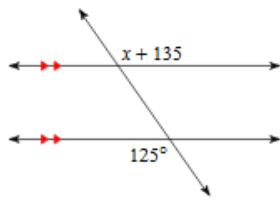
29)



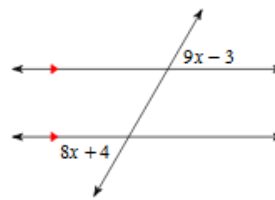
$$\begin{aligned}
 x + 92 &= 84 \\
 -92 &\quad -92 \\
 x &= -8
 \end{aligned}$$



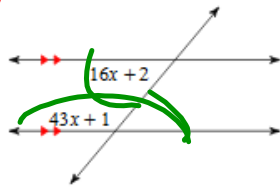
30)



31)

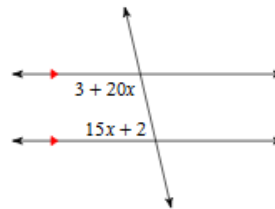


32)

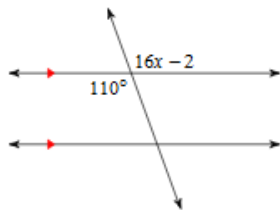


$$43x + 1 + 16x + 2 = 180$$

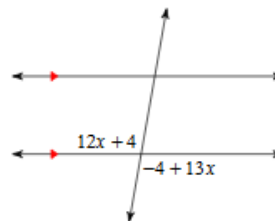
33)



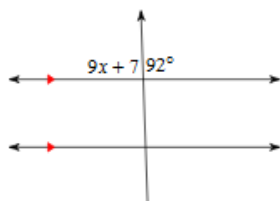
34)



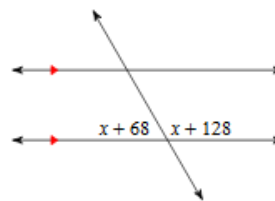
35)



36)

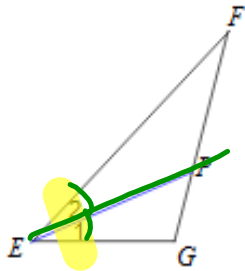


37)



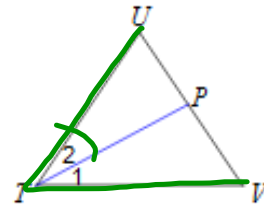
Each figure shows a triangle with one of its angle bisectors.

- 38) Find  $x$  if  $m\angle 2 = 2x + 11$  and  $m\angle 1 = 3x + 5$ .



$$2x + 11 = 3x + 5$$

- 39) Find  $x$  if  $m\angle 2 = 5x - 2$  and  $m\angle VTU = 9x + 2$ .



$$\frac{9x + 2}{2} = 5x - 2$$

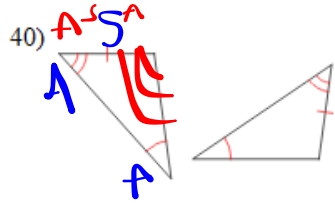
$$4.5x + 1 = 5x - 2$$

$$-4.5x + 2 \quad -4.5x + 2$$

$$3 = .5x$$

$$(6 = x)$$

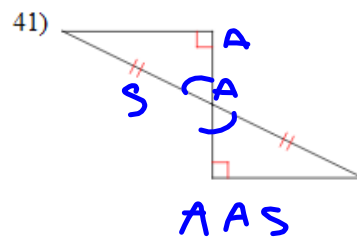
State if the two triangles are congruent. If they are, state how you know.



~~AAS~~ → ASA

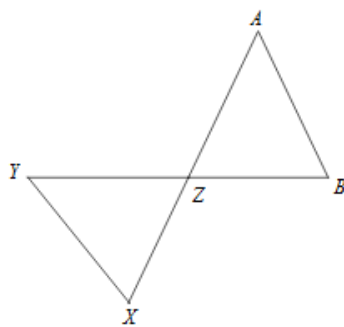
if you ever have AAS,

you can get ASA so AAS works



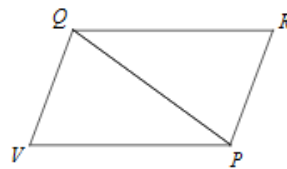
Complete each congruence statement by naming the corresponding angle or side.

42)  $\triangle ZXY \cong \triangle ZBA$



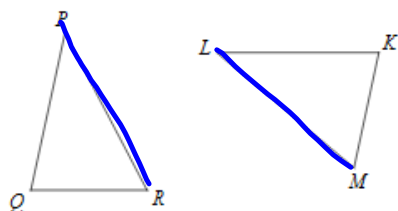
$\angle YZX \cong ?$

43)  $\triangle PQR \cong \triangle QPV$



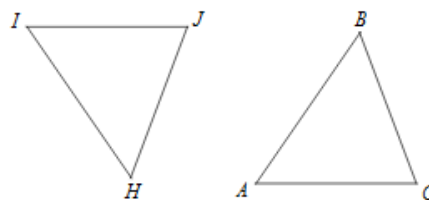
$\overline{RP} \cong ?$

44)  $\triangle RQP \cong \triangle MKL$



$\overline{PR} \cong ? \overline{LM}$

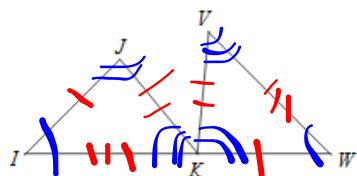
45)  $\triangle HIJ \cong \triangle ABC$



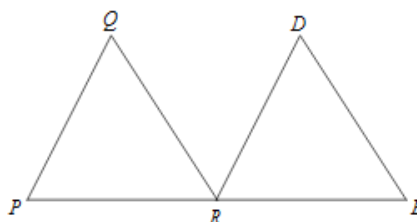
$\angle J \cong ?$

Mark the angles and sides of each pair of triangles to indicate that they are congruent.

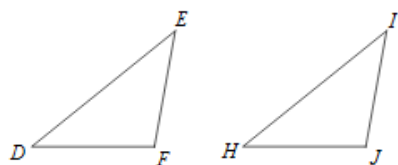
46)  $\triangle IJK \cong \triangle WKV$



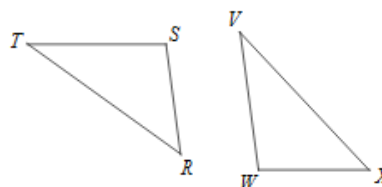
47)  $\triangle PQR \cong \triangle RDE$



48)  $\triangle EFD \cong \triangle IJH$

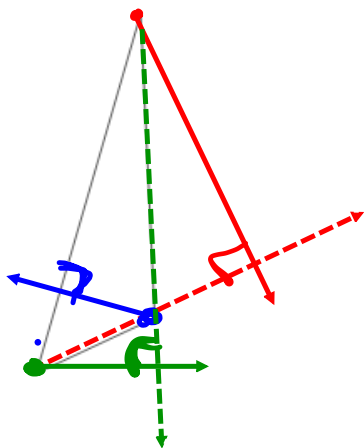


49)  $\triangle TSR \cong \triangle VWX$

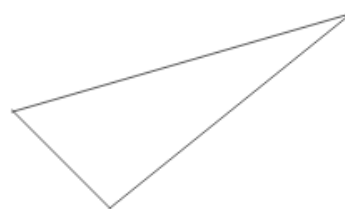


For each triangle, construct all three altitudes to show they are concurrent.

50)



51)



Get Compass and ruler,  
finish Review packet

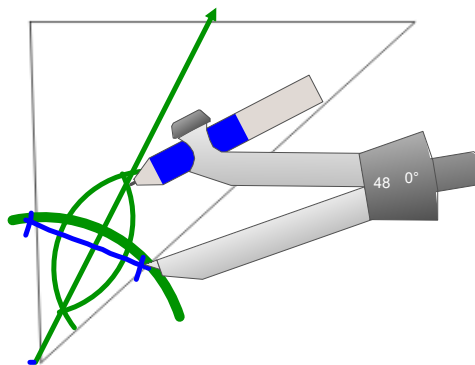
+new chapter from box

For each triangle, construct all three angle bisectors to show they are concurrent.

52)



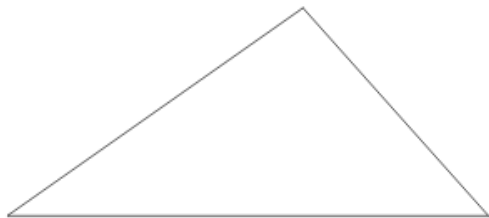
53)



/

For each triangle, construct all three perpendicular bisectors to show they are concurrent.

54)



55)

