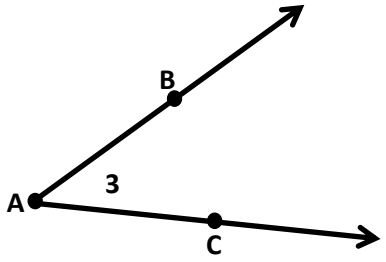
REVIEW: ANGLES, PARALLEL & PERPENDICULAR LINES

1) Name the angle in ***FOUR DIFFERENT*** ways.

2) A is the _____ of the angle.

3) The sides of the angle are _____ and _____.



FIND THE MEASURES OF THE NUMBERED ANGLES *WITHOUT* USING A PROTRACTOR.

4) $m\angle 1 =$_____

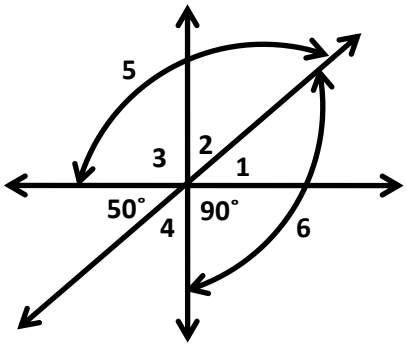
$m\angle 2 =$ _____

$m\angle 3 =$ _____

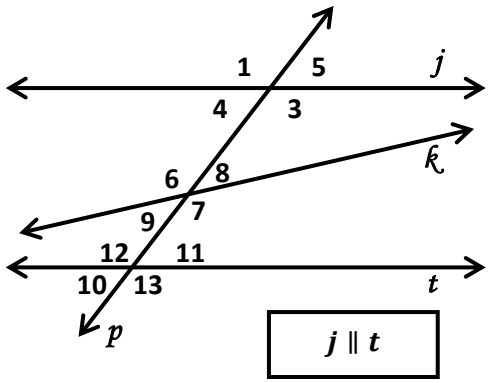
$m\angle 4 =$ _____

$m\angle 5 =$ _____

$m\angle 6 =$ _____



IDENTIFY EACH ANGLE PAIR. Use the diagram to answer questions 18 – 34.



$j \parallel t$

5) $\angle 1$ and $\angle 3$

6) $\angle 3$ and $\angle 7$

7) $\angle 10$ and $\angle 5$

8) $\angle 6$ and $\angle 8$

9) $\angle 3$ and $\angle 11$

10) $\angle 9$ and $\angle 11$

11) $\angle 5$ and $\angle 11$

12) $\angle 4$ and $\angle 8$

13) $\angle 4$ and $\angle 6$

14) $\angle 1$ and $\angle 9$

16) Is $\angle 1 \cong \angle 3$? Why or why not?

17) Is $\angle 5$ supplementary to $\angle 3$? Why or why not?

18) Is $\angle 4 \cong \angle 8$? Why or why not?

Given $j \parallel t$, answer 31 – 34.

19) Which ***angles*** will be congruent to $\angle 1$?

20) Will $\angle 3$ be congruent to $\angle 13$? Why or why not?

21) What is true about $\angle 4$ and $\angle 3$? Why?

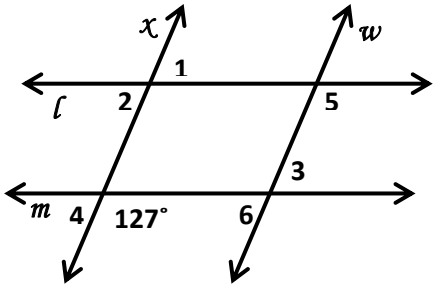
22) What is true about $\angle 3$ and $\angle 11$? Why?

Given ℓ ll m and x ll w in each problem. Solve for *x* and the missing angle measures. SHOW ALL WORK!

23) $m\angle 1 =$ _____; $m\angle 2 =$ _____;

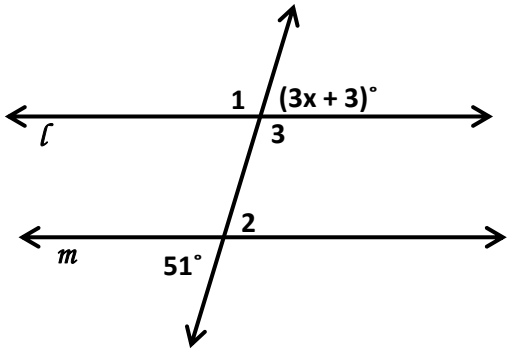
$m\angle 3 =$ _____; $m\angle 4 =$ _____;

$m\angle 5 =$ _____; $m\angle 6 =$ _____.



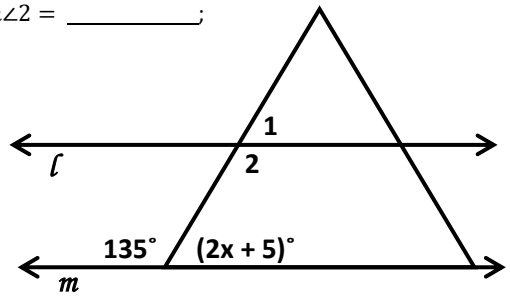
24) x = _____; $m\angle 1 =$ _____;

$m\angle 2 =$ _____; $m\angle 3 =$ _____.

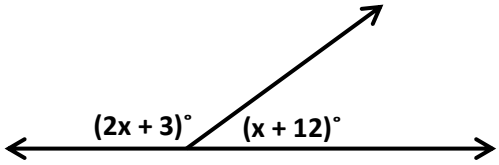


25) x = _____; $m\angle 1 =$ _____;

$m\angle 2 =$ _____;



26) x = _____

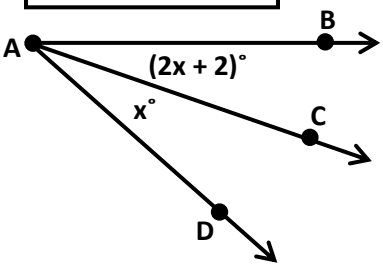


27) x = _____;

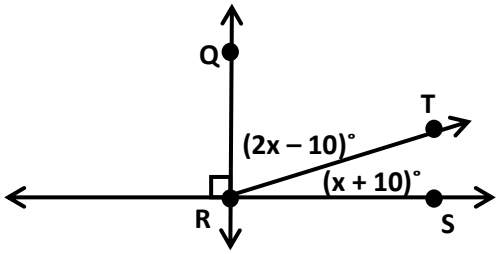
$m\angle BAC =$ _____;

$m\angle CAD =$ _____.

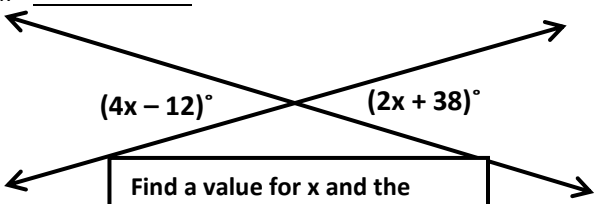
$m\angle BAD = 68°$



28) x = _____



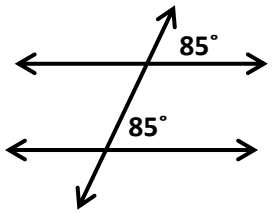
29) x = _____



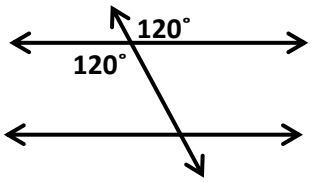
Find a value for x and the measures of all four angles.

Decide if there is enough information to determine if each pair of lines is parallel. Given the angles marked are congruent, state the specific postulate or theorem that justifies each answer of "PARALLEL". If there is not enough information, then write "NO" OR "NEI".

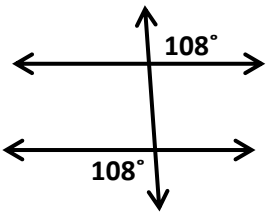
30) _____



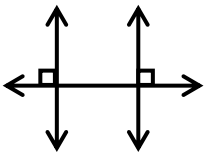
31) _____



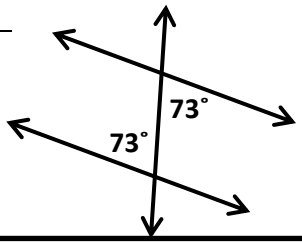
32) _____



33) _____

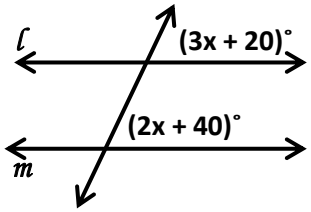


34) _____

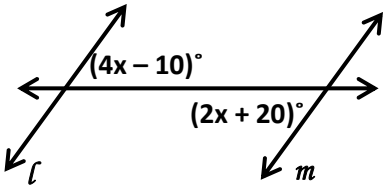


Find the value of x so that ℓ ll m.

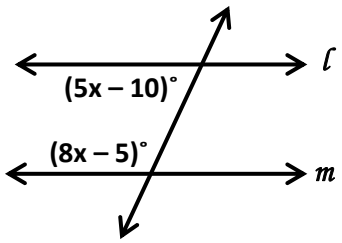
35) x = _____



36) x = _____

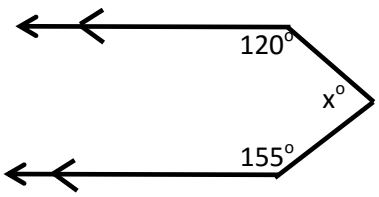


37) x = _____



Find the value of x

38) x = _____



39) r = _____