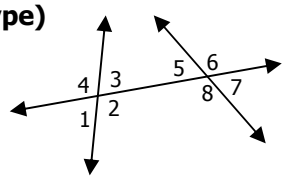
Parallel Lines and Transversals

Name _____ **Period** _____

M

II. Identify the angles that go with the following types. (give all angles for each type)



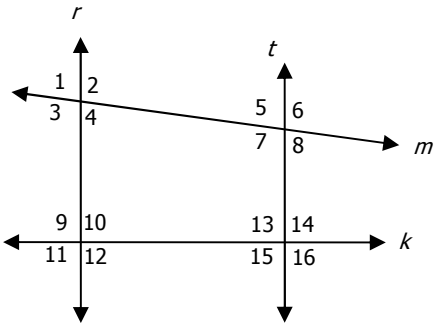
5) Corresponding angles

6) Alternate exterior angles

7) Consecutive interior angles

8) Alternate interior angles

III. Using the figure below, state the transversal that forms each pair of angles. Then identify the special name for the angle pair.



9) $\angle 1$ and $\angle 12$ transversal = _____ special name = _____

10) $\angle 2$ and $\angle 10$ transversal = _____ special name = _____

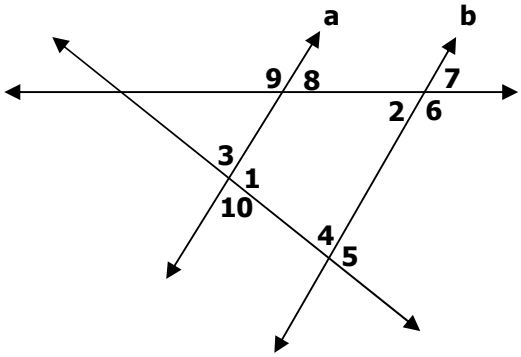
11) $\angle 4$ and $\angle 9$ transversal = _____ special name = _____

12) $\angle 6$ and $\angle 3$ transversal = _____ special name = _____

13) $\angle 14$ and $\angle 10$ transversal = _____ special name = _____

14) $\angle 7$ and $\angle 13$ transversal = _____ special name = _____

In figure below $a \parallel b$, $m\angle 1 = 78°$, and $m\angle 2 = 47°$.
Find measure of each angle.



21) $\angle 3$

22) $\angle 4$

23) $\angle 5$

24) $\angle 6$

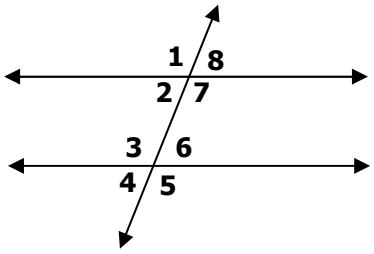
25) $\angle 7$

26) $\angle 8$

27) $\angle 9$

28) $\angle 10$

In the figure, $l \parallel m$. Find the measure of each angle. Each problem is different.



35) If $m\angle 7 = 100°$, then $m\angle 3$ = _____

36) If $m\angle 7 = 175°$, then $m\angle 6$ = _____

37) If $m\angle 7 = 120°$, then $m\angle 5$ = _____

38) If $m\angle 4 = 20°$, then $m\angle 7$ = _____

39) If $m\angle 3 = 140°$, then $m\angle 8$ = _____

40) If $m\angle 4 = 30°$, then $m\angle 1$ = _____

41) If $m\angle 4 = 40°$, then $m\angle 2$ = _____

42) If $m\angle 7 = 125°$, then $m\angle 4$ = _____

I. If $m\angle 2 = 58°$ and $m\angle 13 = 111°$, then find the missing angle measures. x ll m, z ll y

55) $m\angle 1 =$ _____

56) $m\angle 2 =$ _____

57) $m\angle 3 =$ _____

58) $m\angle 4 =$ _____

59) $m\angle 5 =$ _____

60) $m\angle 6 =$ _____

61) $m\angle 7 =$ _____

62) $m\angle 8 =$ _____

63) $m\angle 9 =$ _____

64) $m\angle 10 =$ _____

65) $m\angle 11 =$ _____

66) $m\angle 12 =$ _____

67) $m\angle 13 =$ _____

68) $m\angle 14 =$ _____

*69) $m\angle 15 =$ _____

70) $m\angle 16 =$ _____ (16-19 look at line x and m)

71) $m\angle 17 =$ _____

72) $m\angle 18 =$ _____

73) $m\angle 19 =$ _____