



Algebra Facts:

Parallel lines: _____

Perpendicular lines: _____

Slopes are _____

Name the angle type for each pair:

1) $\angle 1 = \angle 14$ _____ 3) $\angle 9 = \angle 11$ _____ 5) $\angle 4 = \angle 16$ _____

2) $\angle 15 = \angle 14$ _____ 4) $\angle 7 = \angle 12$ _____ 6) $\angle 3 = \angle 11$ _____

If $a \parallel b$ and $l \parallel m$, what relationship does each pair have? (alt, supp, co)

7) $\angle 13 = \angle 16$ _____ 9) $\angle 5 = \angle 10$ _____ 11) $\angle 9 = \angle 16$ _____

8) $\angle 13 = \angle 6$ _____ 10) $\angle 12 = \angle 8$ _____ 12) $\angle 5 = \angle 4$ _____

If $a \parallel b$ and $l \parallel m$, find the angle measure of:

13) $m\angle 14 = \underline{\quad}^\circ$ if $m\angle 15 = 60^\circ$ why? If _____ then lines \parallel .

14) $m\angle 15 = \underline{\quad}^\circ$ if $m\angle 7 = 100^\circ$ why? _____

15) $m\angle 10 = \underline{\quad}^\circ$ if $m\angle 2 = 70^\circ$ why? _____

16) $m\angle 16 = \underline{\quad}^\circ$ if $m\angle 3 = 50^\circ$ why? _____

17) $m\angle 2 = \underline{\quad}^\circ$ if $m\angle 7 = 40^\circ$ why? _____

18) $m\angle 13 = \underline{\quad}^\circ$ if $m\angle 1 = 80^\circ$ why? _____

Find the slope of the line passing through: $m = \frac{y_2 - y_1}{x_2 - x_1}$

19) (4, 1) (5, 6) _____

21) (6, -3) (6, 4) _____

20) (4, -2) (-3, 5) _____

22) (4, 5) (9, 5) _____

Given: $y = 2x - 3$

* Given: $3x + 2y = 6$ *

23) slope = _____

25) slope = _____

2) slope of a line \parallel to the given line: _____

26) slope of line \parallel to given line _____

3) slope of a line \perp to the given line: _____

27) slope of line \perp to given line _____

4) What is the slope of $2y = 5x - 3$? _____