

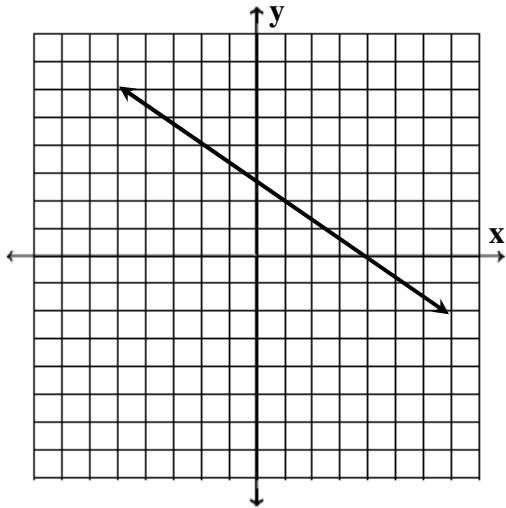
Geometry
Assignment 3.3

1. The general equation of a line in slope-intercept form is _____.

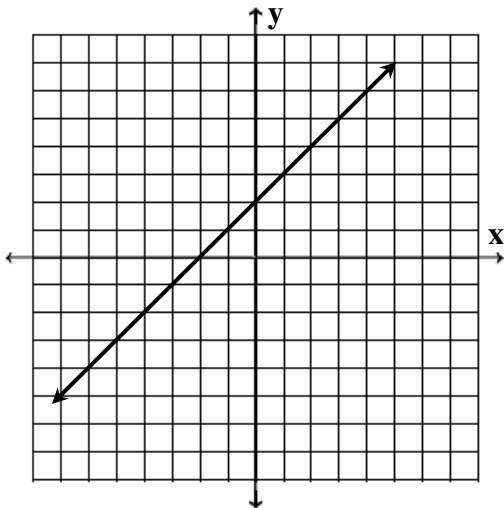
m represents the _____ and b represents the _____.

2. The equation for the slope of a line is _____.

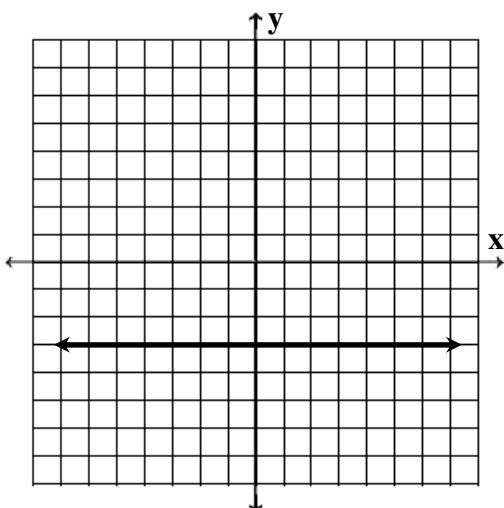
3. a) Find the slope of the line using the coordinate plane. b) Find the slope of the line using two points.



4. a) Find the slope of the line using the coordinate plane. b) Find the slope of the line using two points.



5. a) Find the slope of the line using the coordinate plane. b) Find the slope of the line using two points.



Write an equation of the line that passes through the given point and has the given slope.

6. $P(4, 5)$, slope = $\frac{1}{2}$

7. $P(0, 1)$, slope = 4

8. $P(3, -3)$, slope = $-\frac{2}{3}$

9. $P(5, 7)$, slope = 1

10. $P(1, 2)$, slope = 2

11. $P(8, -2)$, slope = 0

State the name for the given pair of angles and their mathematical relationship.

12. $\angle 1$ and $\angle 7$

13. $\angle 4$ and $\angle 8$

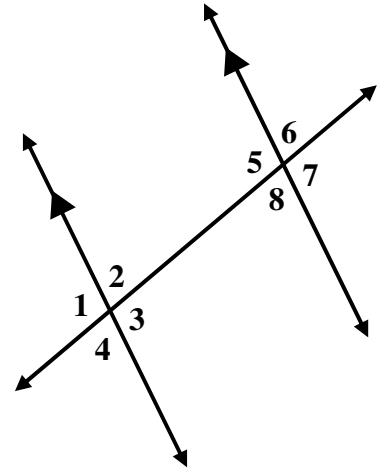
14. $\angle 6$ and $\angle 7$

15. $\angle 3$ and $\angle 5$

16. $\angle 2$ and $\angle 5$

17. $\angle 2$ and $\angle 4$

18. $\angle 1$ and $\angle 8$



19. $\angle 1$ and $\angle 2$ are corresponding angles.

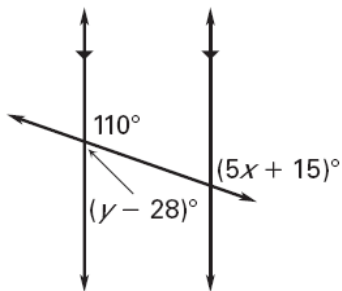
If $m\angle 1 = 8x$ and $m\angle 2 = 2x + 60$, find x .

20. $\angle 6$ and $\angle 7$ are consecutive interior angles.

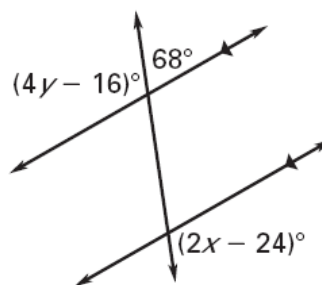
If $m\angle 6 = 2x + 54$ and $m\angle 7 = 8x - 14$, find the measure of the larger angle.

Find the value of x and y .

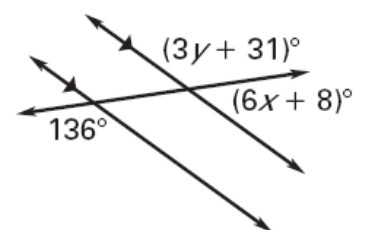
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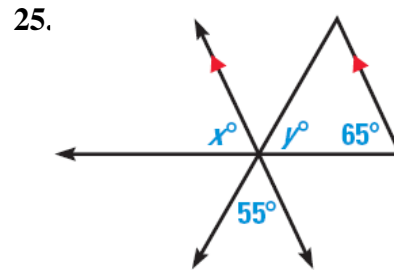
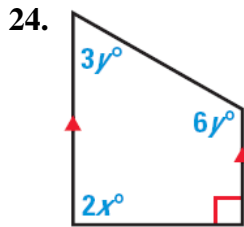
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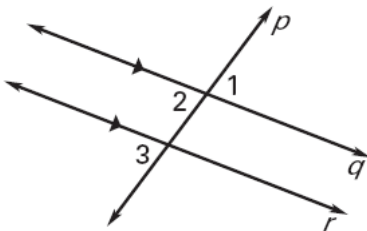


Find the value of the variables.



26. Given: $q \parallel r$

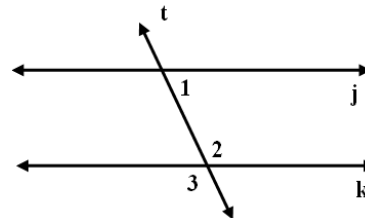
Prove: $\angle 1 \cong \angle 3$



Statement	Reasons
1. $q \parallel r$	1.a) _____
2. $\angle 1 \cong \angle 2$	2.b) _____
3. $\angle 2 \cong \angle 3$	3.c) _____
4. $\angle 1 \cong \angle 3$	4.d) _____

27. Given: $j \parallel k$

Prove: $m\angle 1 + m\angle 3 = 180^\circ$



Statement	Reason
1. $j \parallel k$	1.a) _____
2. $m\angle 1 + m\angle 2 = 180^\circ$	2.b) _____
3. $m\angle 2 = m\angle 3$	3.c) _____
4. $m\angle 1 + m\angle 3 = 180^\circ$	4.d) _____

Answer Key:

- 1) $y = mx + b$, slope, y -intercept 2) $m = \frac{y_1 - y_2}{x_1 - x_2}$ 3) $m = -\frac{2}{3}$ 4) $m = 1$ 5) $m = 0$ 6) $y = \frac{1}{2}x + 3$
- 7) $y = 4x + 1$ 8) $y = -\frac{2}{3}x - 1$ 9) $y = x + 2$ 10) $y = 2x$ 11) $y = -2$ 12) Alt. Ext., $m\angle 1 = m\angle 7$
- 13) Corr., $m\angle 4 = m\angle 8$ 14) Linear Pair, $m\angle 6 + m\angle 7 = 180^\circ$ 15) Alt. Int., $m\angle 3 = m\angle 5$
- 16) Cons. Int., $m\angle 2 + m\angle 5 = 180^\circ$ 17) Vertical $\angle$'s, $m\angle 2 = m\angle 4$ 18) No name, $m\angle 1 + m\angle 8 = 180^\circ$
- 19) $x = 10$ 20) 98° 21) $x = 19, y = 98$ 22) $x = 68, y = 32$ 23) $x = 6, y = 35$ 24) $x = 45, y = 20$
- 25) $x = 65, y = 60$
- 26) a) Given b) Vertical $\angle$'s c) Corr. $\angle$'s d) Trans. Prop.
- 27) a) Given b) Cons. Int. $\angle$'s c) Vertical $\angle$'s d) Substitution