Name : _____ Score : _____

Parallel and Perpendicular Lines

Sheet 1

1) Find the equation of the line parallel to the line $4y + 48 - 16x = 0$ and passes through the point $(-4, -2)$.

_____

2) Write the equation of the line passing through the point $(7, -3)$ and perpendicular to the line joining the points $(1, 4)$ and $(3, 6)$.

_____

3) The line l passes through the point $(-2, 1)$ and parallel to the line m which has a slope of 5. Find the equation of the line l.

_____

4) Find the equation of the line passing through the point $(-1, 5)$ and perpendicular to the line $y = \frac{3}{4}x + 6$.

_____

5) A line u passing through the point $(8, 9)$ is parallel to the line v that cuts the x and y axis at $x = -3$ and $y = 6$. Find the equation of the line u.

_____

Name : _____ Score : _____

Answer key

Parallel and Perpendicular Lines

Sheet 1

1) Find the equation of the line parallel to the line $4y + 48 - 16x = 0$ and passes through the point $(-4, -2)$.

$4x - y = -14$

2) Write the equation of the line passing through the point $(7, -3)$ and perpendicular to the line joining the points $(1, 4)$ and $(3, 6)$.

$x + y = 4$

3) The line l passes through the point $(-2, 1)$ and parallel to the line m which has a slope of 5. Find the equation of the line l.

$5x - y = -11$

4) Find the equation of the line passing through the point $(-1, 5)$ and perpendicular to the line $y = \frac{3}{4}x + 6$.

$4x + 3y = 11$

5) A line u passing through the point $(8, 9)$ is parallel to the line v that cuts the x and y axis at $x = -3$ and $y = 6$. Find the equation of the line u.

$2x - y = 7$

Name : _____ Score : _____

Parallel and Perpendicular Lines

Sheet 2

1) The line u passing through the point (6, 8) and perpendicular to the line v whose slope is $\frac{3}{5}$. Find the equation of the line u.

_____

2) Find the equation of the line that is parallel to the line 7x – y + 3 = 0 and passes through the poi

_____

3) Write the equat e –4x + 8y + 16 = 0 and passes thro

_____

4) The line m passi ne line n which has a slope of 6. Find

_____

5) Find the equation of the line that is perpendicular to the line 2x + 3y + 5 = 0 and passes through the point (2, –4).

_____

Name : _____ Score : _____

Answer key

Parallel and Perpendicular Lines

Sheet 2

1) The line u passing through the point (6, 8) and perpendicular to the line v whose slope is $\frac{3}{5}$. Find the equation of the line u.

5x + 3y = 54

2) Find the equation of the line that is parallel to the line 7x – y + 3 = 0 and passes through the poi

7x – y

3) Write the equat e –4x + 8y + 16 = 0 and passes thro

2x + y

4) The line m passi ne line n which has a slope of 6. Find

6x – y = –43

5) Find the equation of the line that is perpendicular to the line 2x + 3y + 5 = 0 and passes through the point (2, –4).

3x – 2y = 14

Name : _____ Score : _____

Parallel and Perpendicular Lines

Sheet 3

1) A line p passing through the point (–1, –1) and parallel to the line q which has a slope of –5. Find the equation of the line p.

_____

2) Write the equation of the line that is parallel to the line 5 = 4y – 9x and passes through the poi

_____

3) Find the equatio –6) and perpendicular to the line n wh

_____

4) Write the equat 7x = 2 and passes through the poi

_____

5) The line l passes through the point (1, 7) and parallel to the line m whose slope is 9. Find the equation of the line l.

_____

Name : _____ Score : _____

Answer key

Parallel and Perpendicular Lines

Sheet 3

1) A line p passing through the point (–1, –1) and parallel to the line q which has a slope of –5. Find the equation of the line p.

5x + y = –6

2) Write the equation of the line that is parallel to the line 5 = 4y – 9x and passes through the poi

9x – 4y

3) Find the equatio –6) and perpendicular to the line n wh

7x – y

4) Write the equat 7x = 2 and passes through the poi

8x + 7y

5) The line l passes through the point (1, 7) and parallel to the line m whose slope is 9. Find the equation of the line l.

9x – y = 2

Name : _____ Score : _____

Parallel and Perpendicular Lines

Sheet 4

1) Write the equation of the line passing through the point (8, 1) and perpendicular to the line joining the points (3, 4) and (9, 2).

_____

2) The line k passes through the point (7, –6) and parallel to the line h which has a slope of 9. Find

_____

3) Find the equatio = 0 and passes through the poi

_____

4) A line s passing t that cuts the x and y axis at x = 9 and

_____

5) Find the equation of the line passing through the point (–2, 3) and perpendicular to the line $y = \frac{5}{3}x - 10$.

_____

Name : _____ Score : _____

Answer key

Parallel and Perpendicular Lines

Sheet 4

1) Write the equation of the line passing through the point (8, 1) and perpendicular to the line joining the points (3, 4) and (9, 2).

3x – y = 23

2) The line k passes through the point (7, –6) and parallel to the line h which has a slope of 9. Find

9x – y

3) Find the equatio = 0 and passes through the poi

5x – y

4) A line s passing t that cuts the x and y axis at x = 9 and

7x – 9y = 33

5) Find the equation of the line passing through the point (–2, 3) and perpendicular to the line $y = \frac{5}{3}x - 10$.

3x + 5y = 9

Name : _____ Score : _____

Parallel and Perpendicular Lines

Sheet 5

1) A line v passing through the point (–9, –1) and parallel to the line w which has a slope of –3. Find the equation of the line v.

_____

2) Write the equation of the line that is perpendicular to the line $-3x + 21y + 24 = 0$ and passes thro

_____

3) The line r passe o the line s whose slope is $\frac{7}{6}$. Find

_____

4) Find the equatio y + 15 = 0 and passes through the poi

_____

5) Find the equation of the line that is perpendicular to the line joining the points (–2, 8) and (4, 9) and passes through the point (1, –1).

_____

Name : _____ Score : _____

Answer key

Parallel and Perpendicular Lines

Sheet 5

1) A line v passing through the point (–9, –1) and parallel to the line w which has a slope of –3. Find the equation of the line v.

$3x + y = -28$

2) Write the equation of the line that is perpendicular to the line $-3x + 21y + 24 = 0$ and passes thro

$7x + y$

3) The line r passe o the line s whose slope is $\frac{7}{6}$. Find

$6x + 7y$

4) Find the equatio y + 15 = 0 and passes through the poi

$5x + 4y = -67$

5) Find the equation of the line that is perpendicular to the line joining the points (–2, 8) and (4, 9) and passes through the point (1, –1).

$6x + y = 5$