Name: _____   Date _____

Topic: <u>Parallel and Perpendicular lines- Worksheet 1</u>

Do the following:

1. Find the slope of a line parallel to the line whose equation is $x + y = 2$.

2. Find the slope of a line perpendicular to the line whose equation is $3y + 6x = 15$.

3. $d_1 \perp d_2$ If the slope of d_1 is $3/2$, and the slope of d_2 is $(x+2)/3$, find the value of x.

4. $d_1 \perp d_2$ If the slope of d_1 is $4/6$, and the slope of d_2 is $8/(3x-8)$, find the value of x.

5. Find the slope of a line parallel to a line whose slope is $(2/3)$.

6. Find the slope of the line perpendicular to a line whose slope is $(3/8)$.

7. Find the slope of a line parallel to the line whose equation is $y + 4x = 15$.

8. Find the slope of a line perpendicular to the line whose equation is $2y + x = 8$.

9. $d_1 \parallel d_2$ If the slope of d_1 is $4x/7$, and the slope of d_2 is $(x+12)/16$, find the value of x.

10. $d_1 \parallel d_2$ If the slope of $d1$ is $2/3$, and the slope of d_2 is $4/(x-5)$, find the value of x.

Name: _____   Date _____

Topic: Parallel and Perpendicular lines- Worksheet 2

Do the following:

1. Find the slope of a line parallel to the line whose equation is $y - x = 5$.

2. Find the slope of a line perpendicular to the line whose equation is $4y + 12x = 16$.

3. $m_1 \perp m_2$ If the slope of m_1 is $2/5$, and the slope of m_2 is $(x+6)/8$, find the value of x.

4. $m_1 \perp m_2$ If the slope of m_1 is $5/8$, and the slope of m_2 is $6/(2x-12)$, find the value of x.

5. Find the slope of a line parallel to a line whose slope is $(3/4)$.

6. Find the slope of the line perpendicular to a line whose slope is $(2/5)$.

7. Find the slope of a line parallel to the line whose equation is $y + 3x = 15$.

8. Find the slope of a line perpendicular to the line whose equation is $3y + x = 9$.

9. $m_1 \parallel m_2$ If the slope of m_1 is $2x/5$, and the slope of m_2 is $(x+9)/13$, find the value of x.

10. $m_1 \parallel m_2$ If the slope of m_1 is $1/4$, and the slope of m_2 is $6/(x-7)$, find the value of x.

Name: _____   Date _____

Topic: <u>Parallel and Perpendicular lines- Worksheet 3</u>

Do the following:

1. Find the slope of a line parallel to the line whose equation is $y - 2x = 10$.

2. Find the slope of a line perpendicular to the line whose equation is $2y + 8x = 10$.

3. $k_1 \perp k_2$ If the slope of k_1 is $4/3$, and the slope of k_2 is $(x+3)/4$, find the value of x.

4. $k_1 \perp k_2$ If the slope of k_1 is $4/5$, and the slope of k_2 is $5/(3x-11)$, find the value of x.

5. Find the slope of a line parallel to a line whose slope is $(1/6)$.

6. Find the slope of the line perpendicular to a line whose slope is $(4/7)$.

7. Find the slope of a line parallel to the line whose equation is $y + 4x = 18$.

8. Find the slope of a line perpendicular to the line whose equation is $4y + 2x = 8$.

9. $k_1 \parallel k_2$ If the slope of k_1 is $x/6$, and the slope of k_2 is $(x+3)/12$, find the value of x.

10. $k_1 \parallel k_2$ If the slope of k_1 is $3/5$, and the slope of k_2 is $5/(x-5)$, find the value of x.

Name: _____   Date _____

Topic: <u>Parallel and Perpendicular lines- Worksheet 4</u>

Do the following:

1. Find the slope of a line parallel to the line whose equation is $y - 3x = 12$.

2. Find the slope of a line perpendicular to the line whose equation is $3y + 12x = 18$.

3. $p_1 \perp p_2$ If the slope of p_1 is $5/6$, and the slope of p_2 is $(x+6)/5$, find the value of x.

4. $p_1 \perp p_2$ If the slope of p_1 is $5/6$, and the slope of p_2 is $6/(4x-14)$, find the value of x.

5. Find the slope of a line parallel to a line whose slope is $(2/9)$.

6. Find the slope of the line perpendicular to a line whose slope is $(3/8)$.

7. Find the slope of a line parallel to the line whose equation is $y + 2x = 16$.

8. Find the slope of a line perpendicular to the line whose equation is $5y + 4x = 10$.

9. $p_1 \parallel p_2$ If the slope of p_1 is $2x/7$, and the slope of p_2 is $(x+6)/14$, find the value of x.

10. $p_1 \parallel p_2$ If the slope of p_1 is $4/6$, and the slope of p_2 is $8/(x-9)$, find the value of x.

Name: _____   Date _____

Topic: Parallel and Perpendicular lines- Worksheet 5

Do the following:

1. Find the slope of a line parallel to the line whose equation is $y - 4x = 16$.

2. Find the slope of a line perpendicular to the line whose equation is $2y + 6x = 14$.

3. $s_1 \perp s_2$ If the slope of s_1 is $2/9$, and the slope of s_2 is $(x+2)/6$, find the value of x.

4. $s_1 \perp s_2$ If the slope of s_1 is $6/7$, and the slope of s_2 is $8/(2x-10)$, find the value of x.

5. Find the slope of a line parallel to a line whose slope is $(3/6)$.

6. Find the slope of the line perpendicular to a line whose slope is $(4/9)$.

7. Find the slope of a line parallel to the line whose equation is $y + 3x = 18$.

8. Find the slope of a line perpendicular to the line whose equation is $4y + 3x = 12$.

9. $s_1 \parallel s_2$ If the slope of s_1 is $3x/4$, and the slope of s_2 is $(x+3)/16$, find the value of x.

10. $s_1 \parallel s_2$ If the slope of s_1 is $2/5$, and the slope of s_2 is $6/(x-4)$, find the value of x.