MAC1105 College Algebra
2.4 Practice Problems

For each of the following pairs of lines in 1-3, determine whether the lines are parallel, perpendicular, or neither.

1. $y=\frac{1}{2}x-3;\quad 2x-4y=15$

2. $y=-\frac{2}{3}x+10;\quad 2x-3y=18$

3. $y=\frac{7}{8}x-7;\quad 8x+7y=14$

Use the given conditions to write an equations for each line in point-slope form and slope-intercept form. Use these directions for 4-9.

4. Passing through $(-2,5)$ and parallel to the line whose equation is $y=-4x+9$.

5. Passing through $(-1,-3)$ and parallel to the line whose equation is $4x+3y=12$.

6. Passing through $(5,-1)$ and perpendicular to the line whose equation is $y=-2x+3$.

7. Passing through $(7,1)$ and perpendicular to the line whose equation is $3x+5y=15$.

8. Passing through $(-3,5)$ and parallel the x-axis.

9. Passing through $(7,4)$ and perpendicular to the x-axis.