

**Intermediate Algebra Skill**  
**Writing Equations of a Line**

Write the Standard form of an equation, given the following properties:

1) Slope= -1; y-intercept= 1

2) Slope =  $\frac{8}{5}$ ; y-intercept= -5

3) Slope= -7; y-intercept= 3

4) Slope=  $-\frac{1}{4}$ ; y-intercept= -5

5) Through (3,-4); slope=  $-\frac{2}{3}$

6) Through (-4,4); slope=  $-\frac{4}{5}$

7) Through (-5,-3); slope=  $\frac{5}{9}$

8) Through (-3,5); slope=  $-\frac{4}{3}$

9) Through (2,2) and (-1,-2)

10) Through (4,-5) and (-2,-3)

11) Through (0,2) and (4,0)

12) Through (0,3) and (-5,-2)

13) Through (-2,-2) and parallel to  $y = \frac{7}{2}x - 5$

14) Through (2,3) and parallel to  $y = 3x - 2$

15) Through (4,-3) and perpendicular to  $y = \frac{1}{2}x - 2$

16) Through (2,5) and perpendicular to  $y = -\frac{1}{4}x - 2$

## Answers to Writing Equations of a Line

1)  $x + y = 1$

2)  $8x - 5y = 25$

3)  $7x + y = 3$

4)  $x + 4y = -20$

5)  $2x + 3y = -6$

6)  $4x + 5y = 4$

7)  $5x - 9y = 2$

8)  $4x + 3y = 3$

9)  $4x - 3y = 2$

10)  $x + 3y = -11$

11)  $x + 2y = 4$

12)  $x - y = -3$

13)  $7x - 2y = -10$

14)  $3x - y = 3$

15)  $2x + y = 5$

16)  $4x - y = 3$