1. Determine which equation is in the slope-intercept, slope-point, or standard form of a line:
    a) $3x - 2y = 5$ b) $2y = 3x - 5$ c) $-3x + 2y = -5$
    d) $y = 6x + 2$ e) $4x + y = 9$ f) $y - 3 = 2(x - 1)$

2. Match each equation with the graph that it most closely resembles.
    a) $y = 2x + 3$ b) $y = -2x + 3$ c) $y = -2x - 3$ d) $y = 2x - 3$
    e) $y = 2x$ f) $y = -2x$ g) $y = 3$ h) $y = -3$

    A.   B.   C.

    D.   E.   F.

    G.   H.   I.
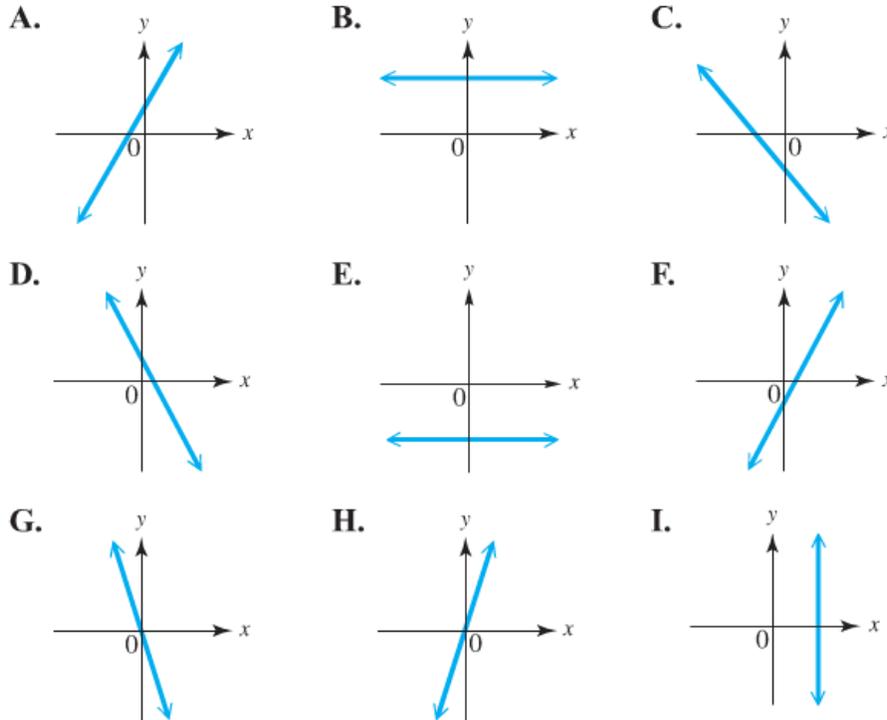
3. Write an equation in slope-intercept form of the line shown in each graph.
    a)   b)
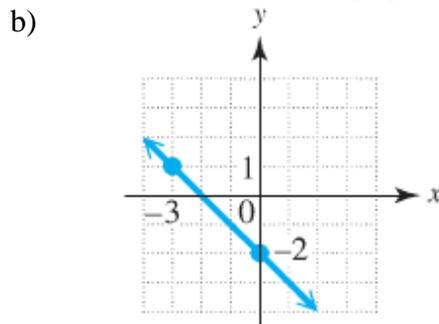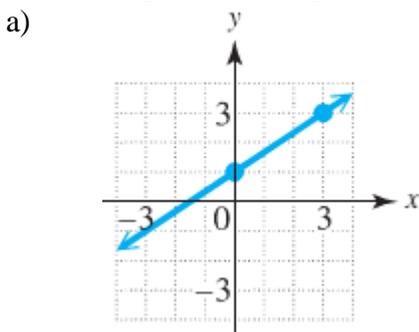
4. For each equation, write it in **slope-intercept form**, give the **slope** of the line, give the **y-intercept**,
    and **graph** the line.
    a) $3x + 4y = 12$ b) $4x - 5y = 20$

5. Find an equation of the line that satisfies the given conditions. Write the equation in both slope-
    intercept and standard form.
    a) through $(7, -2)$; slope $\frac{1}{4}$ b) x-intercept $(3, 0)$; slope 4
    c) through $(-4, -2)$; slope 0 d) through $(-7, 8)$; y-intercept $(0, -3)$

e) through $(9, 10)$; undefined slope

f) through $(-2, 5)$ and $(-8, 1)$

g) through $\left(\frac{3}{4}, \frac{8}{3}\right)$ and $\left(\frac{2}{5}, \frac{2}{3}\right)$

h) through $\left(\frac{1}{2}, -3\right)$ and $\left(-\frac{2}{3}, -3\right)$

i) through $\left(2, \frac{1}{2}\right)$ and $\left(2, -\frac{5}{2}\right)$

j) through $(-2, -2)$; parallel to $-x + 2y = 10$

k) through $(8, 5)$; perpendicular to $2x - y = 7$

l) through $(8, -4)$; perpendicular to $x + 2y = -3$

6. For each situation, write an equation in the form $y = mx + b$, **find and interpret** the ordered pair associated with the equation for $x = 5$, and then answer the question.

   a) Let x represent the number of t-shirts sold at $26 each, and y represent the total cost of the t-shirts (in dollars). What is the total cost of 7 t-shirts? What is the total cost of x t-shirts?

   b) Resident tuition at Broward College is $87.95 per credit hour. There is also a $20 health science application fee. Let x represent the number of credit hours and y represent the cost. How much does it cost for a student in health science to take 15 credit hours?

   c) There is a $30 fee to rent a chain saw, plus $6 per day. Let x represent the number of days the saw is rented and y represent the charge to the user in dollars. If the total charge is $138, for how many days is the saw rented?

7. Observe the data of the corresponding Celsius and Fahrenheit temperatures. Using these data, write the equation that gives F in terms of C.

Celsius/°C	Fahrenheit/°F	Celsius/°C	Fahrenheit/°F
-50°	-58°	5°	41°
-45°	-49°	10°	50°
-40°	-40°	15°	59°
-35°	-31°	20°	68°
-30°	-22°	25°	77°
-25°	-13°	30°	86°
-20°	-4°	35°	95°
-15°	5°	40°	104°
-10°	14°	45°	113°
-5°	23°	50°	122°
0°	32°	55°	131°