SECTION 1-3
GRAPHING

EXERCISE A

Find the x and y-intercepts for the following equations. Then, use the intercepts to graph the line.

1) $2x - 5y = 10$

2) $\frac{1}{3}y + 2x = 2$

3) $x = 3y - 6$

4) $-14 = 7y - 4x$

Change the following equations into slope-intercept form (y = mx + b), assuming they are not already in that form. Then graph each line.

5) $y = -5x - 2$

6) $y = \frac{4}{3}x + 1$

7) $8y + 16 = 2x$

8) $3x - 4y + 15 = 0$

Graph the line using the information given.

9) Passes through (-5, -3) and has slope of -2/7.

10) Passes through the origin has slope of 4.

11) Passes through (2, -4) and has no slope.

Determine the slopes for the following equations then state whether the line, when graphed, would tilt to the left or to the right (you do not need to actually graph the lines to determine their tilt).

12) $y = -\frac{7}{11}x + 8$

13) $6y - 10x = 3$

14) $15 - 4y = 12x$

EXERCISE B

Find the x and y-intercepts for the following equations. Then, use the intercepts to graph the line.

15) $10y - 6x = 30$

16) $y - \frac{2}{3}x = 4$

17) $3y = 6 - 6x$

18) $\frac{4}{3}y + \frac{3}{4}x = 6$

Change the following equations into slope-intercept form (y = mx + b), assuming they are not already in that form. Then graph each line.

19) $y = 3x - 5$

20) $4x - 5y = 15$

21) $y + x - 6 = 0$

22) $\frac{1}{3}y + 2 = 3x$

Graph the line using the information given.

23) Passes through the origin and has slope = -5/2.

24) Passes through (1, -5) and has slope = 6.

25) Passes through (-2, 3) and has zero slope.

EXERCISE C

Determine the direction of tilt (left or right) for the graphs of the following equations.

26) $11y - 15x - 107 = 0$

27) $\frac{4}{5}x + \frac{1}{4}y = \frac{13}{10}$

28) Gabriel and Luisa are finding the slope of the line that passes through (2, 4) and (-1, 5). Who is correct based on the work shown below? Explain your reasoning.

Gabriel: $m = \frac{5-4}{2-(-1)} \text{ or } \frac{1}{3}$

Luisa: $m = \frac{4-5}{2-(-1)} \text{ or } -\frac{1}{3}$

ANSWERS:

1-11) Graphs: See Mr. Paull
1) x-int = 5
y-int = -2
3) x-int = -6
y-int = 2
5) m = -5
b = -2
7) m = 1/4
b = -2
9-11) Graphs: See Mr. Paull
13) right
15-25) Graphs: See Mr. Paull
15) x-int = -5
y-int = 3
17) x-int = 1
y-int = 2
19) m = 3
b = -5
21) m = -1
b = -6
27) left