

Station #1

Identify the slope and y-intercept for each equation. Say whether the line is increasing or decreasing.

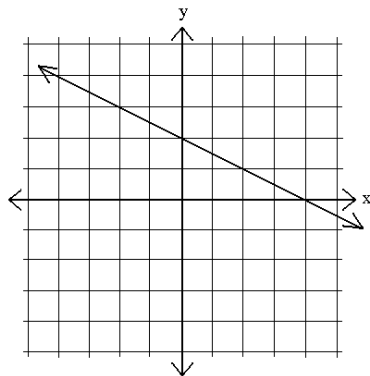
1. $y = 2x - 7$

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

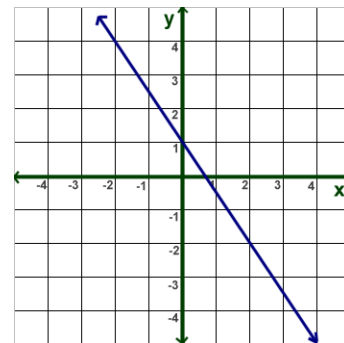
3. $y = -2x - \frac{3}{4}$

4. $y = -3x + \frac{5}{6}$

5.



6.



Station #2

Write the slope-intercept form of the equation.

1. Slope: 4 y-intercept: -3

2. Slope: $-\frac{2}{5}$ y-intercept: 2

3. Slope: 0 y-intercept: -1

4. Slope: $\frac{5}{9}$ y-intercept: 0

5. Bob works for a sales company and earns \$1200 a month. He also earns \$50 for every sale that he makes. Write an equation to represent Bob's monthly salary.

6. Sally is in the business of making cakes. The equipment she bought cost her \$500. She is able to charge \$25 per cake sold. Write an equation to represent her profits.

Station #3

Answer the following questions on your answer sheet.

There is currently 9 inches of snow on the ground. With the thunderstorms today the snow will melt at a rate of 1.5 inches per hour.

1. Write an equation to represent how much snow is on the ground.
2. Graph the equation from #1.
3. What do the slope and y-intercept mean?
4. After how many hours would all of the snow be melted? Show all of your work.
5. Make a table of this situation to show when all of the snow would be melted.

Station #4

Answer the following questions on your answer sheet.

Student council is selling T-shirts during spirit week. It costs \$15 for the design and \$5 to print each shirt.

1. Write an equation to represent the cost of making the shirts.
2. Graph the equation from #1.
3. What do the slope and y-intercept mean?
4. What would it cost for the student council to print 350 shirts? Show all of your work.
5. Make a table of this situation for 7 shirts.

Station #5

Graph each of the given equations on the graphs provided on your answer sheet.

Remember! $\frac{4}{5} = \frac{-4}{-5}$

1. $y = x - 4$

2. $y = -\frac{2}{3}x + 4$

3. $y = 2x - 3$

4. $y = \frac{3}{4}x + 3$

5. A line with a slope of negative 4 and a y-intercept of 0.

6. A line with a slope of $\frac{1}{2}$ and a y-intercept of 4.