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## Skills Maintenance

Finding the Intersecting Points

## Activity 1

Look at the graphs. Write the coordinates of the point where the two functions meet.
1.


The two lines intersect at the point $\qquad$ .
2.


The two lines intersect at the point $\qquad$ _.
$\qquad$


## Activity 1

Look at each of the graphs. Analyze the line and find the slope, $y$-intercept, and equation in $y=m x+b$ form.
1.


What is the slope? $\qquad$
What is the $y$-intercept? $\qquad$
What is the equation? $\qquad$
3.


What is the slope? $\qquad$
What is the $y$-intercept? $\qquad$
What is the equation? $\qquad$
2.


What is the slope? $\qquad$
What is the $y$-intercept? $\qquad$
What is the equation? $\qquad$
4.


What is the slope? $\qquad$
What is the $y$-intercept? $\qquad$
What is the equation? $\qquad$
$\qquad$

Find the job or activity that is the best deal. Write functions from each of the word problems, then plot them on the graph.

1. Mindy has the choice of two different jobs at Thompson's Manufacturing. She wants the job that will pay her the most money per week. Her choices are:
a. Work as a receptionist answering phones. She gets a base pay of $\$ 50$ per week and $\$ 8$ per hour.
b. Work in shipping packing boxes. She gets a base pay of $\$ 10$ per hour.
Mindy can only work 40 hours per week. At what point will she make the same amount for both
 jobs? Which job should she take if she wants to make the most money per week?
2. Rachel volunteered to walk on Sunday for people with cancer. She wants to raise as much money as she can. She has to choose between two ways to raise money.
a. She gets $\$ 20$ just to do the walk and $\$ 2$ for every mile she walks.
b. She gets $\$ 3$ for every mile she walks.

How far does Rachel have to walk before she raises the same amount of money?


Let's say Rachel can walk 15 miles. Which plan should she choose in order to raise the most money?

