## Graphing Linear Equations


(1) Identify the different parts of the graph and the equation.Describe how to solve linear equations by graphing.Does MAC2 have time enough to copy all the data?

Examine if C.H.E.E.S.E. 1 succeeds at getting 8 oz of cheese for Dr. Evil.Determine the linear equation.

Decide which equation belongs to which graph.
with lots of tips, answer keys, and detailed answer explanations for all of the problems.

The complete package, including all problems, hints, answers, and detailed answer explanations is available for all sofatutor.com subscribers.

## Identify the different parts of the graph and the equation.

Fill in the blanks.


## Hints for solving these problems

## 1. Identify the different parts of the graph and the equation.

## Hint \#1

Remember the slope intercept form for linear equations:
$y=m x+b$

Hint \#2
If you substitute $x$ with zero we get:
$y=m \cdot 0+b=b$
This the point, where the line intercepts the $y$-axis, the $y$-intercept.

## Hint \#3

You can also remember the slope as rise over run.

## Answers and detailed answer explanations for these problems

## 1 Identify the different parts of the graph and the equation.

Answer key: 1: slope // 2: y-intercept // 3: y-intercept // 4: rise // 5: run

Remember how to write a linear equation in slope-intercept form:
$y=m x+b$.

- The factor $m$ is the slope.
- The term $b$ is the y-intercept.

Let's analyze the linear equation $y=1.25 x+15$ :

- The slope is $m=1.25$.
- The y-intercept is $b=15$.

The slope is the change of $y$ divided by the change of $x$. You can also think of this as rise over run. In this case, there is a rise of 5 (change in $y$ ) and a run of 4 (change in $x$ ).

To draw the slope it's better to change a decimal into a fraction:

$$
1.25=\frac{125}{100}=\frac{5}{4}
$$

