Linear Equations in Our Every Day World!
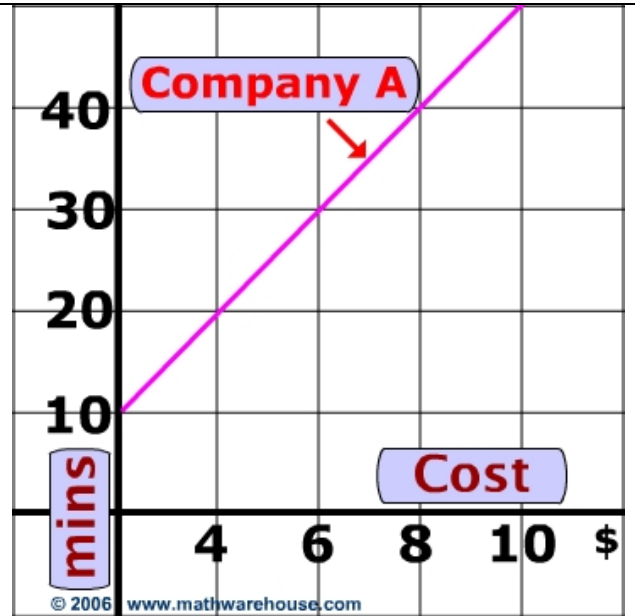
Worksheet based on online lesson @
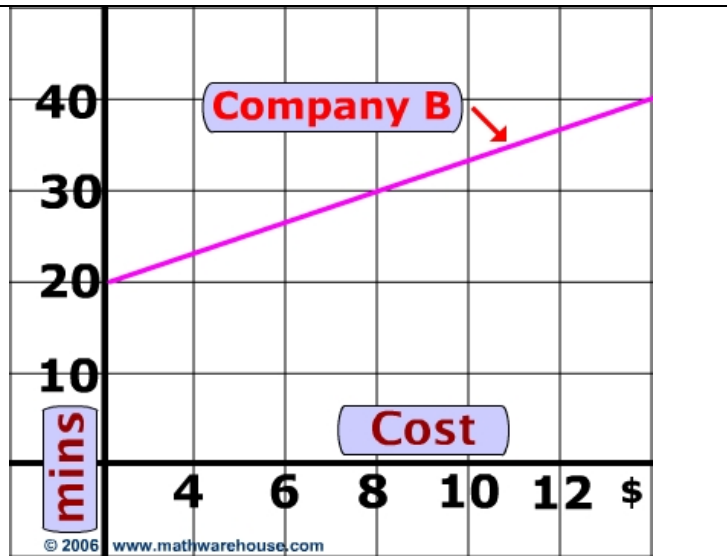**www.mathwarehouse.com/algebra/linear_equations/real-world-applications.html**

Warm up→
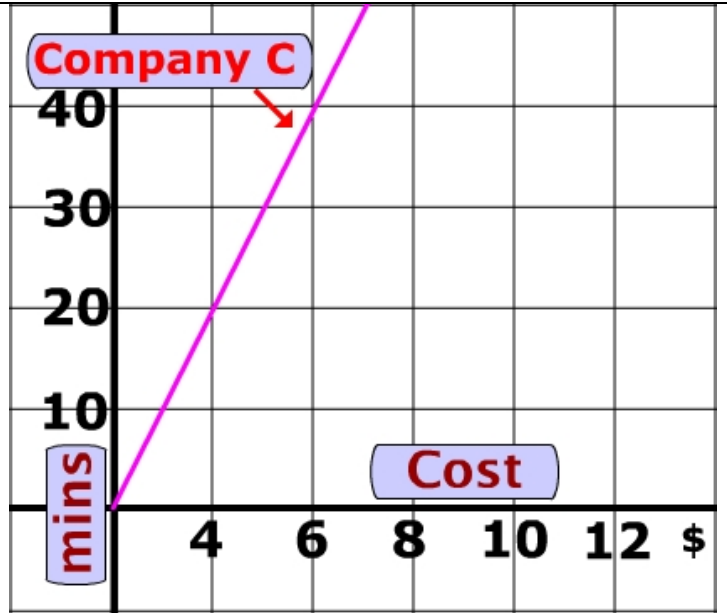
How much does cell phone company A charge for twenty minutes of usage?

1. How much does cell phone company B charge for thirty minutes of usage?

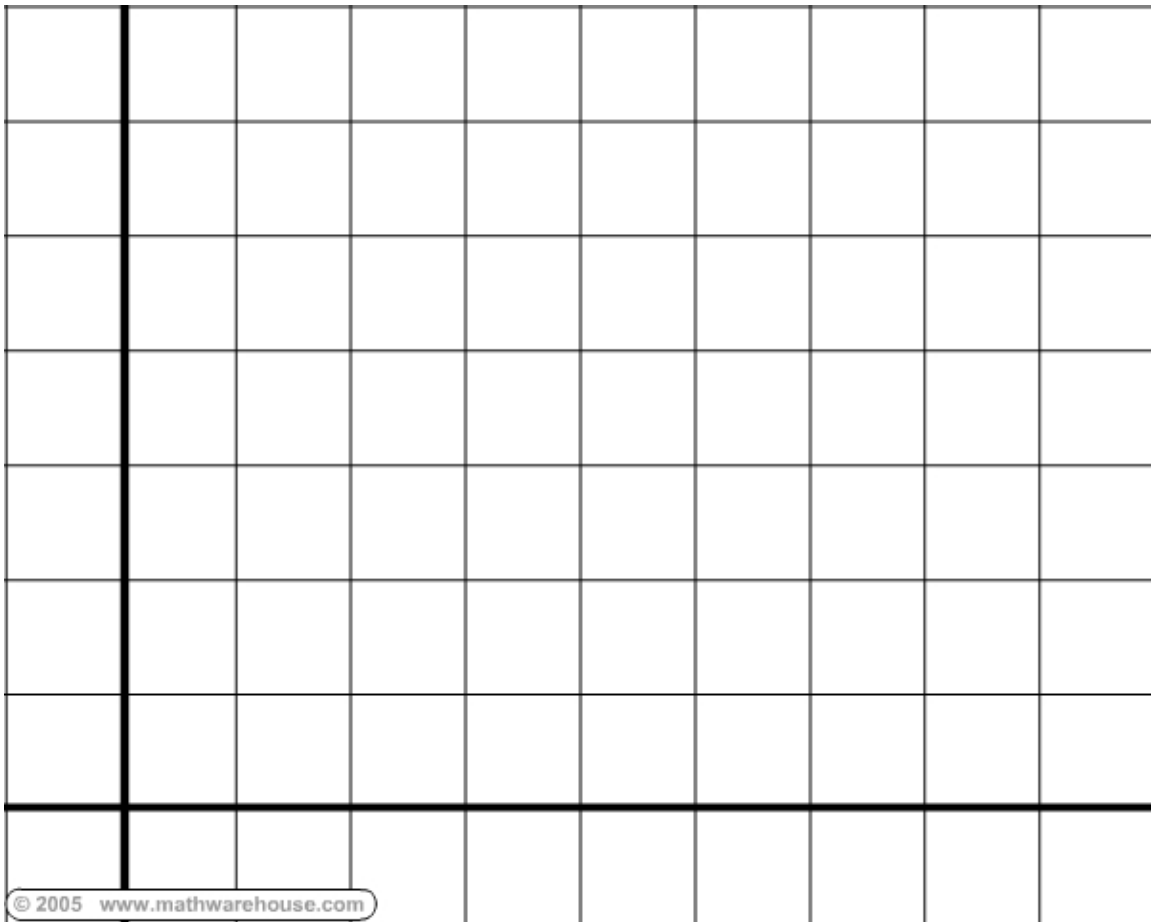**2.** $6 will buy how many minutes on company C's cell phone plan?

Cab Companies!

3. If a cab company charges 1$ each minute, how much would the following rides cost:

Trip	Cost
A) a 5 minute trip	
B) a 15 minute trip	
C) a 12 minute trip	

4. Plot the points in the chart on the graph below:

5. Instead of the x-axis, what does the horizontal (left and right), axis below measure?

6. Instead of the y-axis, what does the vertical (up and down), axis below measure?

7. Which quadrants on the graph above have points? Why don't the other quadrants have any points?

8. "Gab A Lot", a new cell phone company, charges a $10 flat fee each month in addition to its rate of $6 for every ten minutes of air time.

Fill in the chart below to indicate how much you would have to pay if you talked on the phone in the amounts indicated.

Usage (minutes)	Cost
A) 0	
B) 10	
C) 20	
D) 5 minutes	
E) 15 Minutes	

Complete the following sentences:
8. The greater the slope of a company's rate is, the_____.

9. The smaller the slope of a company's rate is, the_____.

10. Why wouldn't the graph of a company' rate have a slope of 0?_____

Think-Pair-Share

10. Would the slope of a company's rate ever be negative?_____
Why or Why not?_____

_____

_____

11. What is the connection between slope and the rate of a company?

_____

_____

_____

12. A deluxe phone company charges a $200 flat fee in addition to its hourly rate of $100 per hour. (This cell phone company offers unprecedented, technology break throughs such as the ability to communicate with your car among other James-Bond-like capabilities, which is why the company can charge so much)

 Use the blank graph below to draw a graph of this company's rate. You need to label both axes.

Graph