

Name \_\_\_\_\_

Date \_\_\_\_\_

Key

**TOWING SERVICE****Verbal Description**

When a tow truck is called, the cost of the service is \$10 plus \$1 per mile that the car must be towed.

Slope:  $\frac{\$1}{1 \text{ Mile}}$

Y-intercept: 0 Miles Towed  
\$10 Charged

**Define your Variables**

Independent: Miles towed

Dependent: Total price

**Equation:**

$$y = mx + b$$

$$y = x + 10$$

**Table of Values**

Miles	Price
X	Y
0	10
1	11
2	12
3	13

Points to Graph:

(1, 11) (2, 12)

(3, 13) (0, 10)

**Graph**

**\*\*Label your Axis\*\***

## CARICATURES AT THE FAIR

<p style="text-align: center;"><b>Verbal Description</b></p> <p>At a fair, Bob draws caricatures. He pays the fair \$30 for space to set up a table and \$2 for each drawing he sells.</p> <p style="text-align: center;">Find the following and explain what they mean.</p> <p>Slope: 2 \$2 per 1 drawing</p> <p>Y-intercept: 0 Drawings sold -30 one \$30</p> <p>X-intercept: 15 drawings sold 0 money made</p>	<p style="text-align: center;"><b>Define your Variables</b></p> <p>Independent: Drawings Sold</p> <p>Dependent: Total Price for Customer</p> <p style="text-align: center;"><b>Write an Equation:</b></p> $y = mx + b$ $y = 2x - 30$
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<p style="text-align: center;"><b>Table of Values</b></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 5px;">Drawing Sold</th> <th style="padding: 5px;">Total price</th> </tr> <tr> <th style="padding: 5px;">X</th> <th style="padding: 5px;">Y</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">0</td> <td style="padding: 5px;">-30</td> </tr> <tr> <td style="padding: 5px;">15</td> <td style="padding: 5px;">0</td> </tr> <tr> <td style="padding: 5px;">20</td> <td style="padding: 5px;">10</td> </tr> <tr> <td style="padding: 5px;">30</td> <td style="padding: 5px;">30</td> </tr> </tbody> </table> <p style="text-align: center; margin-top: 10px;">Points to Graph:</p> <p style="text-align: center; margin-left: 50px;">(0, -30) (15, 0)</p> <p style="text-align: center; margin-left: 50px;">(20, 10) (30, 30)</p>	Drawing Sold	Total price	X	Y	0	-30	15	0	20	10	30	30	<p style="text-align: center;"><b>Graph</b></p> <p style="text-align: center; margin-top: 20px;"><b>**Label your Axis**</b></p>
Drawing Sold	Total price												
X	Y												
0	-30												
15	0												
20	10												
30	30												

## RENTAL CAR

### Verbal Description

The rental rate at Rent a Wreck is \$30 per day plus \$0.25 per mile driven.

Find the following and explain what they mean.

Slope:  $\frac{1}{4}$  \$1 per 4 miles

Y-intercept: 0 miles driven  
\$30 cost

X-intercept: -120 miles driven  
\$0 cost

### Define your Variables

Independent: Miles driven

Dependent: Total price

### Write an Equation:

$$y = mx + b$$

$$y = \frac{1}{4}x + 30$$

$$0 = \frac{1}{4}x + 30$$

$$(-4) - 30 = \frac{1}{4}x(-4)$$

$$-120 = x$$

### Table of Values

Miles Driven	Total Price
X	Y
0	30
4	31
8	32
12	33

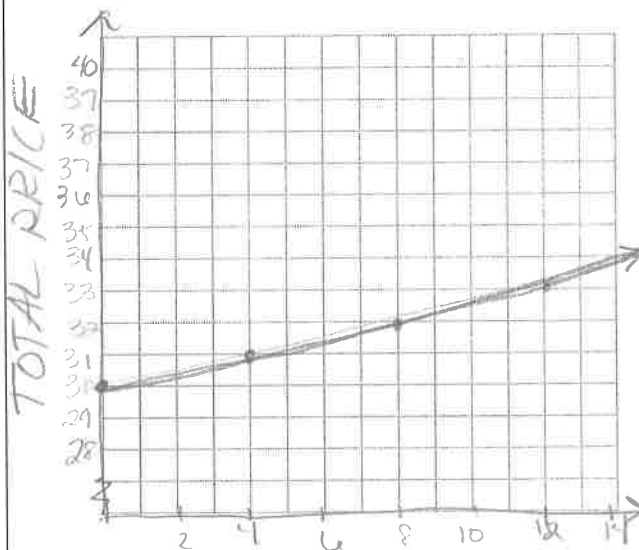
$+4$  ( )  $+1$   
 $+4$  ( )  $+1$   
 $+4$  ( )  $+1$

Points to Graph:

$(0, 30)$   $(4, 31)$

$(8, 32)$   $(12, 33)$

### Graph



Miles Driven  
\*\*Label your Axis\*\*

## CAR VALUE

### Verbal Description

The average value of a certain type of automobile was \$14,220 in 1993 and depreciated by \$2,220 every 2 years.

Find the following and explain what they mean.

Slope:  $\frac{2220}{2} = -1,110$  decrease in price per 1 year

Y-intercept: 0 time  
\$14,220 car price

X-intercept: 12.8 years  
\$0 cars price

### Define your Variables

Independent:

Dependent:

Write an Equation:

$$y = mx + b$$

$$y = -1,110x + 14,220$$

$$10 = -1,110x + 14,220$$

$$\frac{-14,220}{-1,110} = \frac{-1,110x}{-1,110}$$

$$X = 12.8$$

### Table of Values

Years	Price
X	Y
0	14,220
2	12,000
4	9,780
6	7,560

$\left. \begin{matrix} +2 \\ +2 \\ +2 \end{matrix} \right\} \begin{matrix} -220 \\ -220 \\ -220 \end{matrix}$

Points to Graph:

$(0, 14,220)$   $(2, 12,000)$

$(4, 9,780)$   $(6, 7,560)$

### Graph

