Scatterplots and Lines of best Fit

Lines of best fit to a scatterplot can be used to make preditions.

Example:

1. Draw the line of best fit.

2. Find the initial value. **2**

3. Find the rate of change. **2**

$$\frac{\Delta y}{\Delta x} = \frac{4}{2} = 2$$

4. Write the equation of the line. $y = 2x + 2$

Use the equation to answer the following:
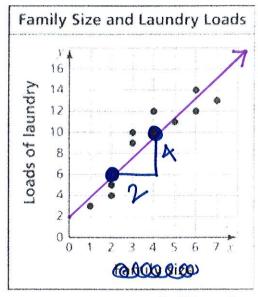
1. How many days does it take to do 30 loads of laundry?

$$30 = 2x + 2$$
$$-2 \qquad -2$$
$$\frac{28}{2} = \frac{2x}{2} \qquad x = 14$$

2. About how many loads can be washed in 15 days?

$$y = 2(15) + 2$$
$$y = 30 + 2$$
$$y = 32$$

Family Size and Laundry Loads

Loads of laundry

# of Days