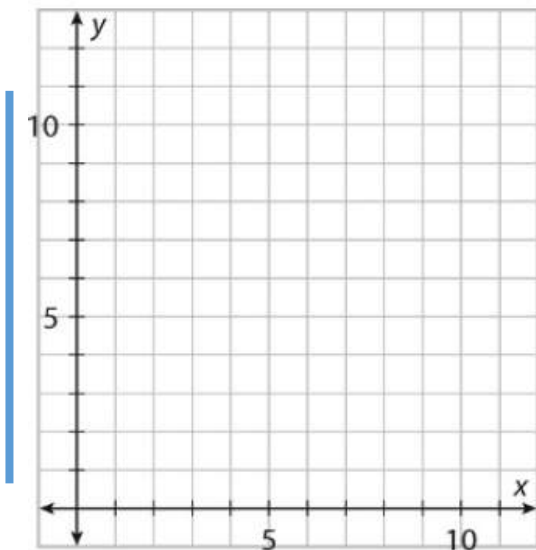Name: _____

One Function, Four Ways

STORY + EQUATION

The function $h(d) = 2d + 1.3$ relates the *h* height (ft.) of the water in a fountain to the *d* diameter (in.) of the pipe carrying the water.

What does h(1) = 3.3 mean?

_____

_____

Make a TABLE

GRAPH- Label the axes!

ANALYSIS

Use your <u>graph</u> to *estimate* the height of the water if the pipe has a diameter of 3.5 in.

Now use your <u>equation</u> to find the *exact* height of the water if the pipe has a diameter of 3.5 in.

Will this graph have any negative values?
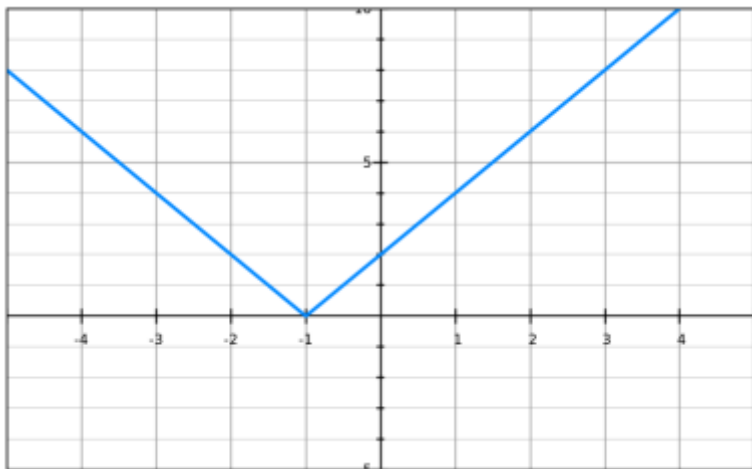
1. Given: $f(x) = 7x + 4$.

    a) *What does it mean* if I ask you to find $f(4)$?

    b) Find $f(4)$.

    c) Find the value of x so that $f(x) = 11$

2. This is the **graph** of $f(x) = |2x +2|$. It shows all the possible input/output solutions of this function.

a.   **Find $f(3)$ using the given function.**

b.   **Using the graph,** find $f(3)$ and write the value below.

c.   **Using your graph,** find x when f(x)=2.

d. Is the ordered pair (3, 1) a solution to this function? Explain how you know.