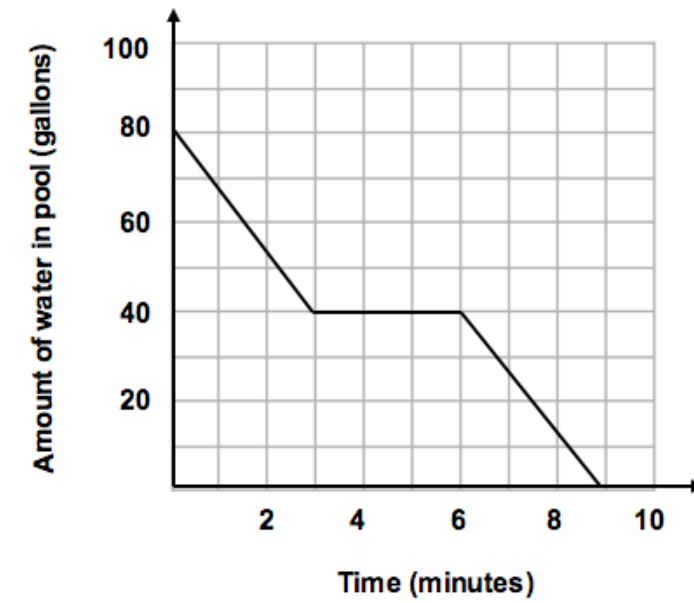


**Module 1 DCA, standard F.IF.B.4 Review, page 1**

1) Chloe is using a pump to drain the water from her pool. It gets clogged partway through, and she has to clear the clog. The graph represents this situation.



a) Independent quantity and units:

Dependent quantity and units:

b) (E LEVEL) Identify the domain and range.

Domain:

Range:

c) Is the graph discrete or continuous?

d) Identify the maximum point (write an ordered pair) and explain what it means in the problem situation.

Maximum point:

Explanation:

e) Is the graph increasing, decreasing, or constant? If it is a mixture of one or more, describe the interval where each occurs.

**Module 1 DCA, standard F.IF.B.4 Review, page 2**

**2) (E LEVEL)** Determine whether each relationship represents a function. Explain why or why not.

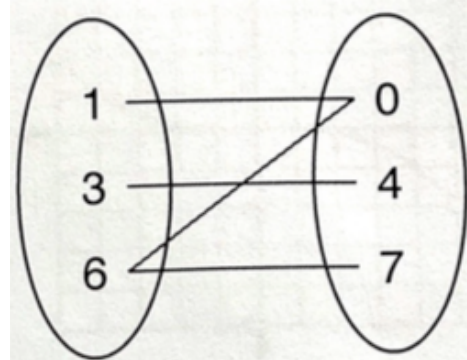
a)

Domain	Range
-5	8
-2	10
0	8
6	15

Function?

Why or why not?

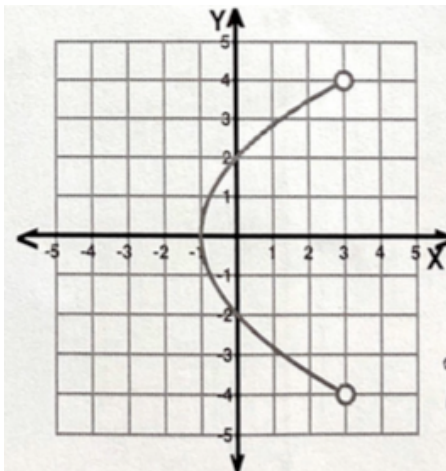
b)



Function?

Why or why not?

c)



for c)

Function?

Why or why not?

**3) OKAY TO SKIP. CAN ONLY HELP YOU, NOT HURT YOU.**

Classify each function as increasing, decreasing, or constant. Explain your reasoning.

a)  $f(x) = 6$

Increasing, decreasing, or constant?

Explanation:

b)  $f(x) = 3x + 2$

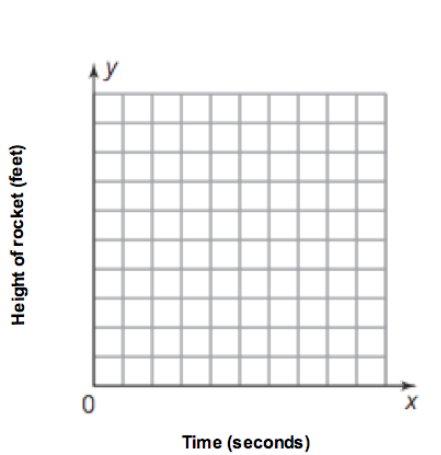
Increasing, decreasing, or constant?

Explanation:

**Module 1 DCA, standard F.IF.B.4 Review, page 3**

**4) DON'T DO THIS ONE. CROSS IT OFF.**

Sketch a graph of the given situation. Samwise shoots a rocket into the air, and it reaches a height of 120 feet before returning to the ground.



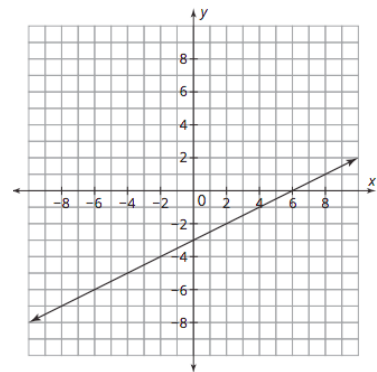
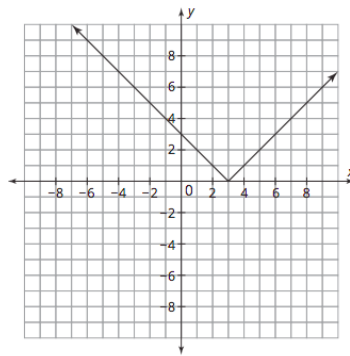
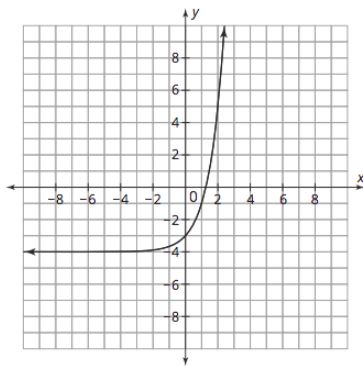
**5) Match each function to its graph. Explain your reasoning.**

**a.**  $f(x) = \frac{1}{2}x - 3$

**b.**  $f(x) = x^2$

**c.**  $f(x) = 7^x - 4$

**d.**  $f(x) = |x - 3|$



a, b, c, or d?

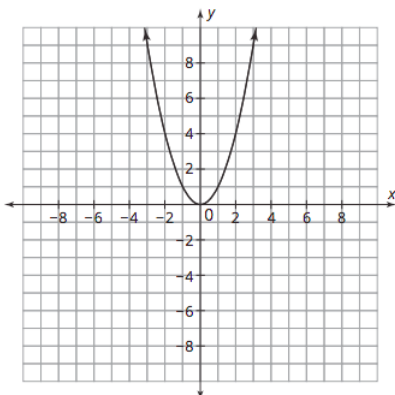
a, b, c, or d?

a, b, c, or d?

Explain your reasoning:

Explain your reasoning:

Explain your reasoning:



a, b, c, or d?

Explain your reasoning: