



Objective: Quadratic Function Graphs

Homework FI-2 – NYA p.254 #2, 3, 9, 13, 15, 18

Do Now: Describe in your own words. 1. Point 2. Plane 3. Axis

Exam Prep: Which of the following is a linear function? Explain how you know.

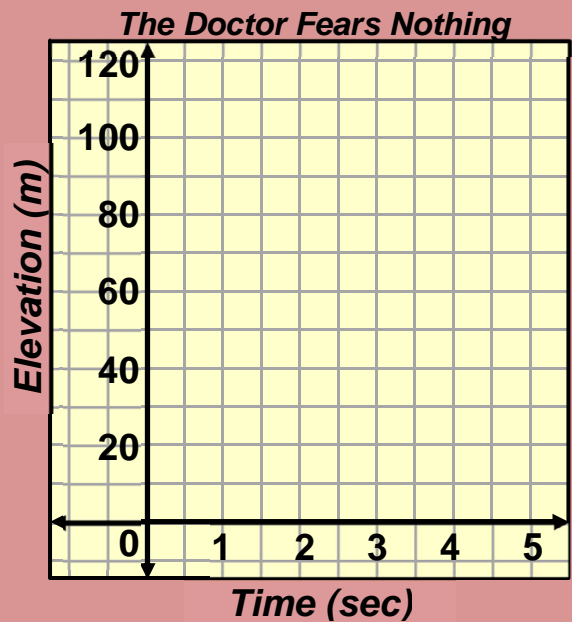
- A) $y = 3 + x$ B) $y = x^2 - 2x - 6$ C) $y = 5^x - 1$ D) $x = y^2 + 1$

Quadratic Curves Investigation: Are graphs pictures of what we see?

The Doctor cliff dives on every third Wednesday. Plot his Elevation (x) vs. Time (y)



x	y
0	120.0
1	115.1
2	100.4
3	75.9
4	41.6
5	-2.5

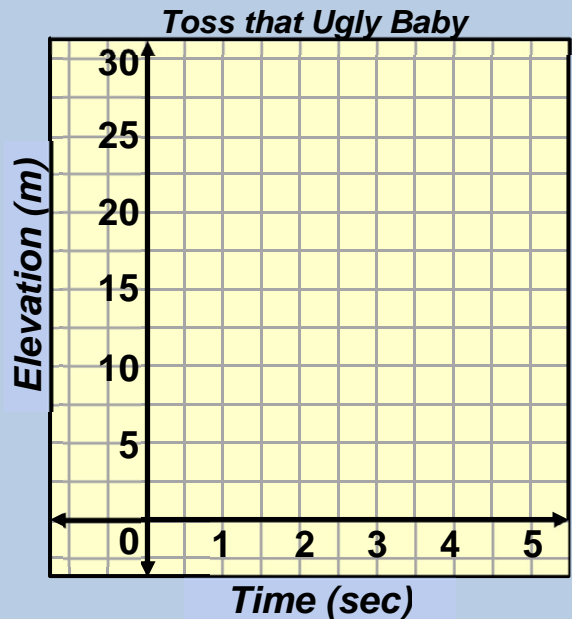


Note: Gravitational acceleration on Earth is -9.8 m/s^2 .

Odd Baby Toss to the Sky
Elevation (x) vs. Time (y)



x	y
0	0
1	19.6
2	29.4
2.5	30.6
3	29.4
4	19.6
5	0

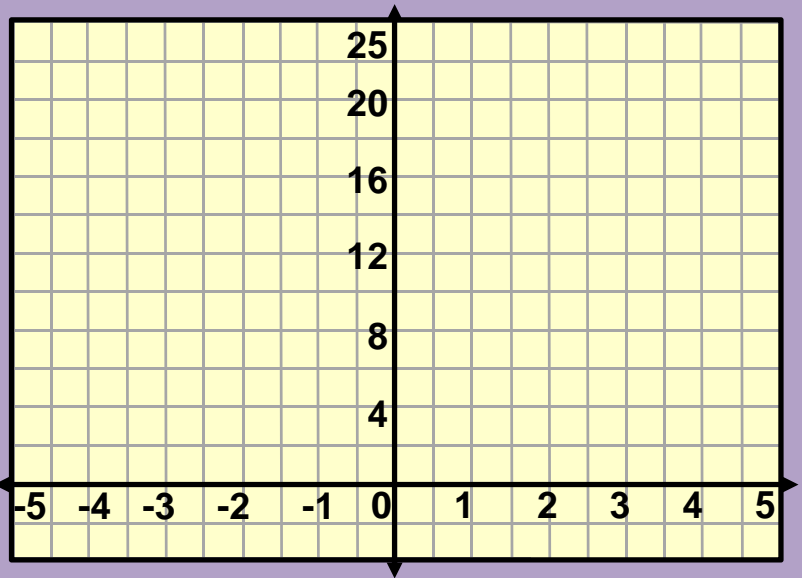


$g = -9.8 \text{ m/s}^2$ and $v_0 = 24.5 \text{ m/s}$
Are the curves actual paths?

**Graph: Measuring a Square
Side Length (x) vs. Area (y)**

x	y
0	
1	
2	
3	
4	
5	

**Reflect the graph in the y-axis
What shape is the graph?**



Wrap-Up

How do these graphs differ from the previous topic in appearance?

How do they differ in real-world terms?

Can you think of an example of each type? Mention units of measure.