Families of Functions Intro

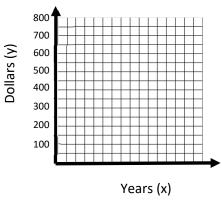
7th Grade Accelerated Math

Name:_____

1. A student invests \$100 and it doubles in value every 5 years. Graph the situation to show the amount of money the student would have after...

- 0 years
- 5 years
- 10 years
- 15 years

Using your graph, predict how much money this student would have after 8 years.



2. A football is punted with an initial vertical speed of 30 m/s. It slows down until it reaches the top of its path after 3 seconds, and then begins to speed up on its way back down. Because of gravity, the speed changes by 10 m/s every second. Find the speed of the football after...

- 0 seconds
- 1 second
- 2 seconds
- 3 seconds (top of path)
- 4 seconds
- 5 seconds
- 6 seconds

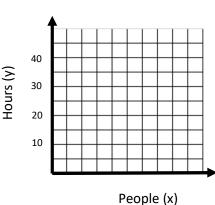
50 (S) 40 D) 30 20 10 1 2 3 4 5 6 Seconds (x)

Using your graph, predict the speed of the football after 2.5 seconds

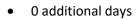
3. It takes 4 people 10 hours to paint the Junior High School. Graph the situation to show the amount of time it would take to complete the job if...

- 1 person was painting
- 2 people were painting
- 4 people were painting
- 8 people were painting

Using your graph, predict how long it would take to complete the job if 5 people were working.

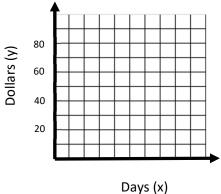


4. A student has \$25 and saves an additional \$5 each day. Graph the situation to show the amount of money the student would have after...



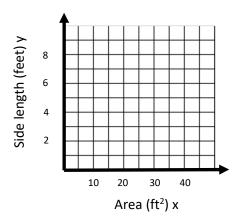
- 2 additional days
- 5 additional days
- 9 additional days

Using your graph, predict how many days it would take to earn \$45.

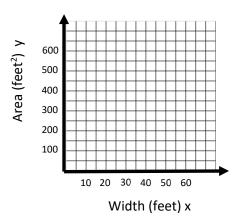


- 5. Find the side length of a square with the following areas...
 - 0 ft²
 - 4 ft²
 - 16 ft²
 - 36 ft²
 - 49 ft²

Using your graph, predict the side length of a square with an area of 20 ft^2 .



- 6. Find the area (length x width) of a rectangle with a perimeter of 100 feet, and a width of...
 - 2 feet
 - 10 feet
 - 20 feet
 - 25 feet
 - 30 feet
 - 40 feet
 - 48 feet



Using your graph, predict the width of a rectangle with an area of 350 ft^2 .