

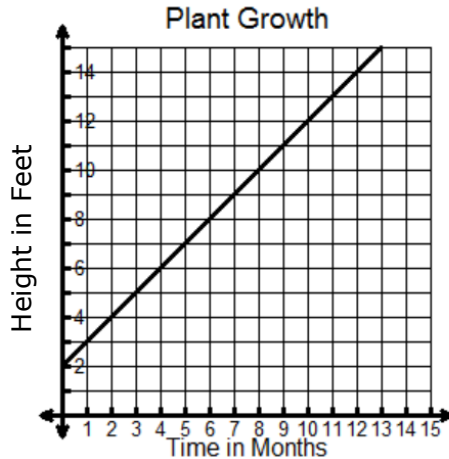


Identifying Domain and Range

Explain Independent Practice

Use the following scenario and graph for questions 1 – 5.

Alberto planted a 2-foot tall bamboo stalk in his back yard. The bamboo stalk grew at a rate of one foot per month. The graph below represents the height of the bamboo over a 13-month period.

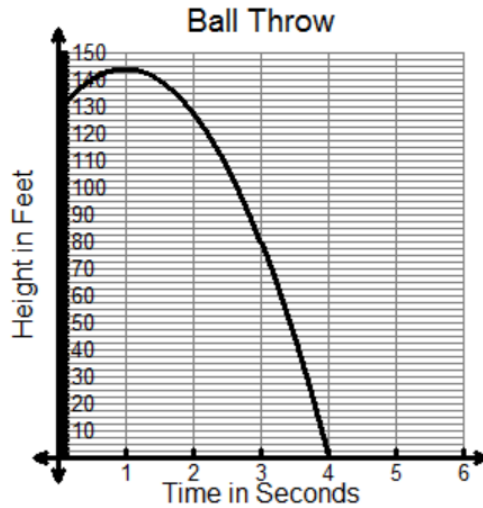


1. What is the domain for this scenario?
2. What is the range for this scenario?
3. If Alberto records the height of the bamboo for 15 months instead of 13 months, what would be the new domain for the scenario?
4. If the original height of the bamboo was 4 feet, what would be the range for the 13-month period?
5. If the bamboo grew three-fourths of a foot each month instead of one foot each month, what would be the domain and range for a 12-month period?



Use the following scenario and graph for questions 6 – 9.

A ball is thrown straight up from the top of a 128-foot tall building with an initial speed of 32 feet per second. The graph below shows the height of the ball as a function of time.



6. What is the domain for the scenario?

7. What is the range for the scenario?

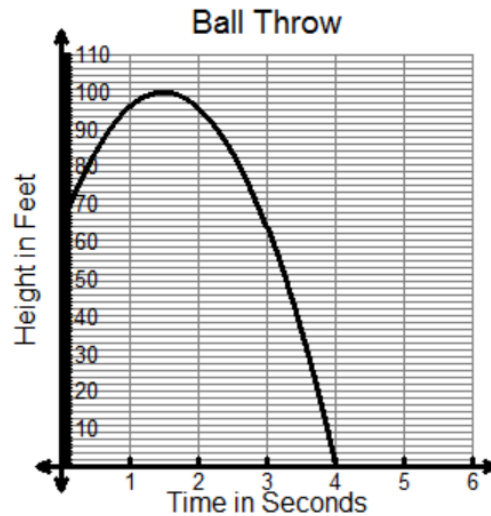
8. If the ball was in the air for 5 seconds, what would be the domain for the scenario?

9. If the maximum height of the ball was 150 feet what would be the range for the scenario?



Use the following scenario and graph for questions 10 – 13.

A ball is thrown straight up from the top of a 64-foot tall building with an initial speed of 48 feet per second. The graph below shows the height of the ball as a function of time.



10. What is the domain for the scenario?

11. What is the range for the scenario?

12. If the ball was in the air for 3 seconds, what would be the domain for the scenario?

13. If the maximum height of the ball was 120 feet what would be the range for the scenario?

