

Note the function, domain, and range for each situation.

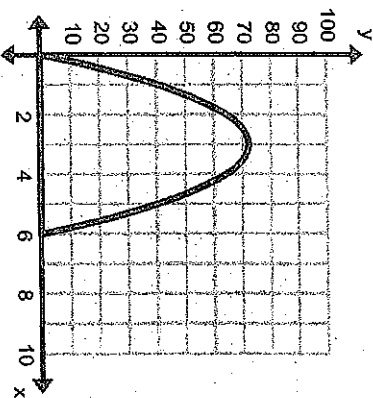
1) Jose works for a construction company. He earns \$150 a week plus \$7.50 an hour. His weekly pay, P , is determined by the number of hours, h . Jose works and is represented by the function $P = 150 + 7.5h$. The maximum amount of hours Jose can work a week is 40.

Function:

Domain:

Range:

3) Michael punted a football with an initial velocity of 48 feet per second. The height of the ball, h , after t , seconds is represented by the function $h = 48t - 8t^2$. What is a reasonable domain and range for this situation?



Function:

Domain:

Range:

2) A baseball tournament begins with 16 teams. After each round, r , half of the teams are eliminated. The number of baseball teams remaining, T , is a function of the number of rounds played, r and can be represented by $T = 16(1/2)^r$.

Function:

Domain:

Range:

4) Brianna has started a business selling school spirit shirts. The initial cost to start was \$200 for 40 shirts. She will sell the shirts for \$12 each. Her profit P , for selling, s , shirts is represented by the function $P = 12s - 200$. What is a reasonable domain and range for this situation?

Function:

Domain:

Range:

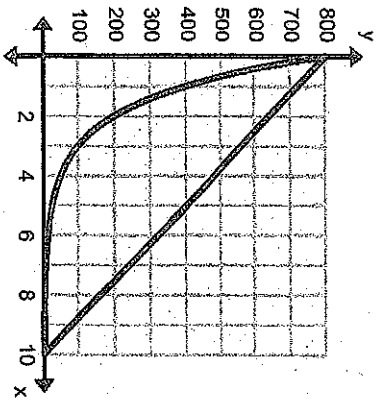
5) The science class is launching rockets. The height, h , of group A's rocket after t seconds can be found using the function $h = 5t^2 - 18t^2$. What is a reasonable domain and range for this situation?

Function:

Domain:

Range:

7) The half life of an 800 mg pain reliever can be represented by the function $y = 800(\frac{1}{2})^x$ where y is the amount of the medication remaining in the blood stream after x hours and the medication is undetectable after 24 hours.



Range:

Domain:

Function:

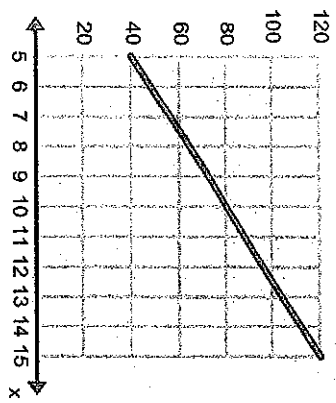
6) A taxi company charges a \$5 fee plus \$0.10 per mile and no trip can be more than 20 miles. The cost, C , for m miles in a taxi is represented by the function $C = 5 + 0.1m$. What is a reasonable domain and range for this situation?

Function:

Domain:

Range:

8) Zackary is working after school at a local trophy shop. He works between 5 and 15 hours per week and earns \$8 an hour. What function could represent this situation, and what is the domain and range?



Range:

Domain:

Function: