9T2-05 Number _____ Name _____ Period _____ Score _____

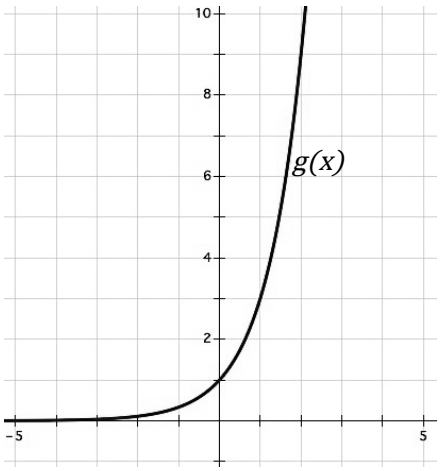
Topic: Interpreting function notation to find the output or input based on what is given

For each function, find the indicated values.

1. $Given$: $h(t) = 2t - 5$

a. $h(-4) =$ ____ b. $h(t) = 23,\ t =$ _____ c. $h(13) =$ _____ d. $h(t) = -33,\ t =$ _____

2)



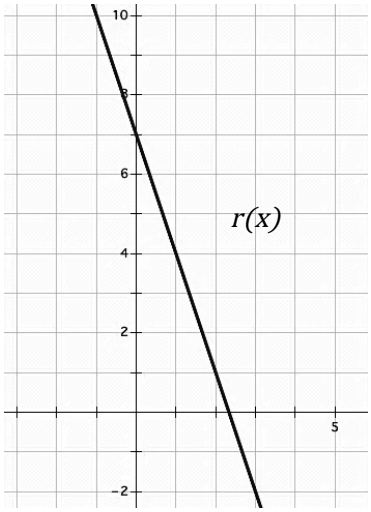
$g(2) =$ _____

b. $g(x) = 3\ ,\ x =$ _____

c. $g(0) =$ _____

d. Write the explicit rule for *g* (*x*).

3)



$r(-1) =$ _____

$r(x) = 4,\ x =$ _____

$r(2) =$ _____

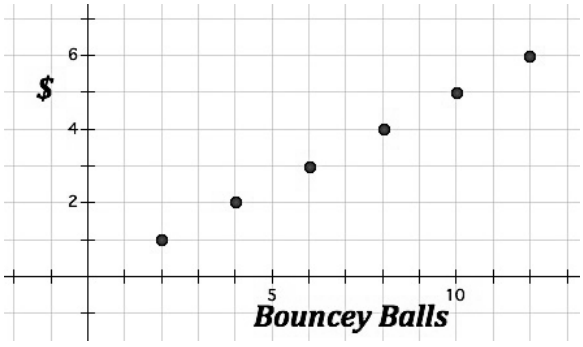
Write the explicit rule for *r* (*x*).

Topic: Distinguishing between discrete and continuous functions

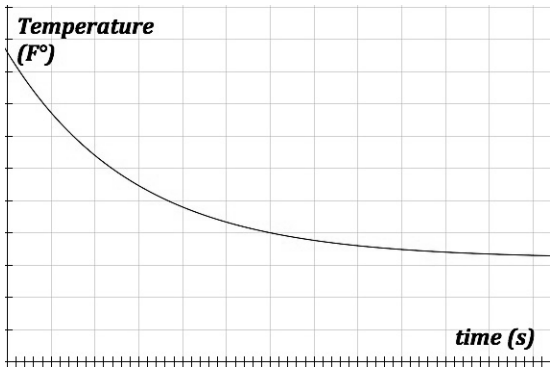
For each context or representation determine whether it is discrete or continuous or could be modeled best in a discrete or continuous way. Justify your answer.

4. Susan puts exactly $5 a week in her piggy bank.

5.



6.



7. Marshal tracks the number of hits he gets each baseball game and is recording his total number of hits for the season in a table.

8. The distance you have traveled since the day began.

9.

Number of gumballs	Cost
5	10¢
10	20¢
15	30¢
20	40¢

10. Stephen deposited $1,000 in a savings account at the bank when he turned 21. He deposits $100 each month. He plans to never withdraw any money until the balance is $150,000.