

Multiple Choice

1. Which of the following is an arithmetic sequence with a common difference of 2?

[A] 1, -3, 5, -7, 9...

[B] 10, 8, 6, 4, 2...

[C] 2, 4, 8, 16, 32...

[D] 13, 15, 17, 19, 21...

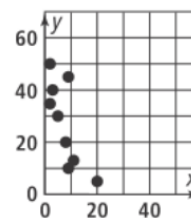
2. What type of correlation does the scatter plot below show?

[A] No Correlation

[B] Weak Negative

[C] Strong Negative

[D] Strong Positive



3. Select an appropriate r-value for the graph in #2.

[A] $r = -0.85$

[B] $r = 0.99$

[C] $r = 0.85$

[D] $r = -0.99$

Free Response

4. You open a savings account with a \$400 deposit. Each month, you deposit \$25.

a. Write a sequence that represents your balances over the first 4 months.

b. Write an explicit, and recursive formula to represent the amount of money you deposit into your savings account.

c. How much money will you have after 12 months?

d. After how many months will you have \$950 in your account?

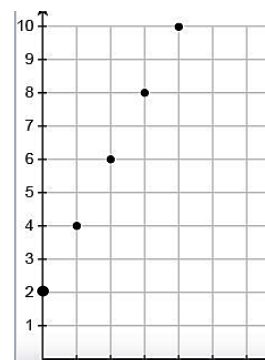
5. Write the explicit formula equivalent to the recursive formula $a_1 = -3$
 $a_n = a_{n-1} + 5$.

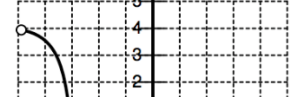

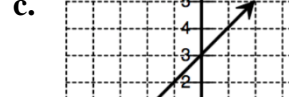
6. Use the graph of $g(x)$ to answer the following questions.

a. What is the common difference?

b. What is a_0 ?

c. Write the recursive formula.



<p>a.</p> 	<p>b.</p> 	<p>c.</p> 
Function?	Function?	Function?
Domain:	Domain:	Domain:
Range:	Range:	Range:

Cost in Dollars	Sales (millions)
2	8
4	6
5	6
7	3
8	2

f. x , when $h(x) = 26$