**Using Equations to Find Answers to Real Life Problems**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Expectation | R | 1 | 2 | 3 | 4 |
| Solving Equations |  |  |  |  |  |
| Representing Answer in Multiple Ways |  |  |  |  |  |
| Reflecting on your Solution |  |  |  |  |  |
| Communication |  |  |  |  |  |

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The cost to join Rideau’s weight room is

**$3 per visit plus a $12 one-time membership fee.**

The equation for cost relative to the number of visits is

**C = 3v + 12**

1. What does **C** stand for in the equation?

2. What does **v** stand for in the equation?

3. Why do we use letters for cost and visit?

**( YOU MUST USE THE EQUATION TO FIND THE ANSWERS TO ALL OF THE QUESTIONS – SO START EACH QUESTION BY WRITING DOWN THIS EQUATION)**

4. If you **visit 1 time**, **what is the cost**?

5. If you **visit 3 times**, **what is the cost**?

6. If you **visit 5 times**, **what is the cost**?

7. **Complete the table** comparing visits and cost below for up to 9 visits.

|  |  |
| --- | --- |
| Number of Visits | Cost ($) |
| 1 |  |
| 3 |  |
| 5 |  |
| 7 |  |
| 9 |  |

8. **Graph** the values from the table on the grid below. (Make a line graph NOT a bar graph)



Remember that the equation is **C = 3v + 12**.

9. If the **cost is $18, how many times did you visit**?

10. If the **cost is $48, how many times did you visit**?

11. If the **cost is $312**, **how many times did you visit**?

12. Reflect: How can you tell from looking at the graph, the table, the equation, the algebra, that your answers for #4,5,6,9,10,11 are correct?

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