NAME:_____

1. 080619a, P.I. A.A.39
The graph of the equation $x + 3y = 6$ intersects the *y*-axis at the point whose coordinates are

[A] (0,6) [B] (0,2)

[C] (6,0) [D] (0,18)

2. 080628a, P.I. A.A.39
Point (*k*, -3) lies on the line whose equation is $x - 2y = -2$. What is the value of *k*?

[A] 8 [B] -6 [C] 6 [D] -8

3. 060721a, P.I. A.A.39
The graph of the equation $2x + 6y = 4$ passes through point $(x,-2)$. What is the value of *x*?

[A] 8 [B] 16 [C] -4 [D] 4

4. 080828a
A line with a slope of $\frac{1}{3}$ passes through the point (3,6). Which point also lies on this line?

[A] (6,3) [B] (-6,3)

[C] (7,6) [D] (-3,-3)

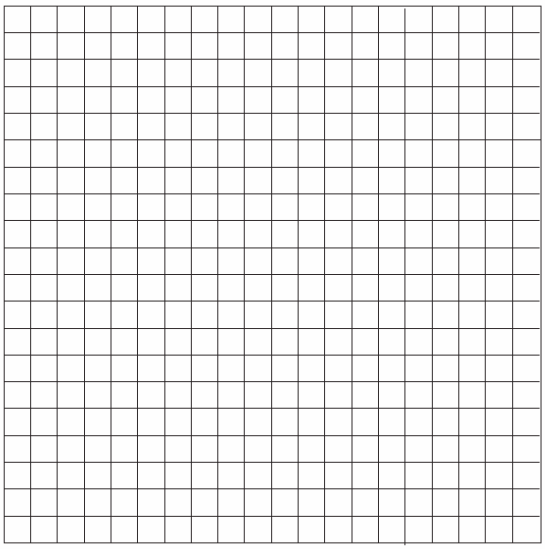
5. 080728a
Line segment *AB* has a slope of $\frac{3}{4}$. If the coordinates of point *A* are (2,5), the coordinates of point *B* could be

[A] (5,9) [B] (6,8)

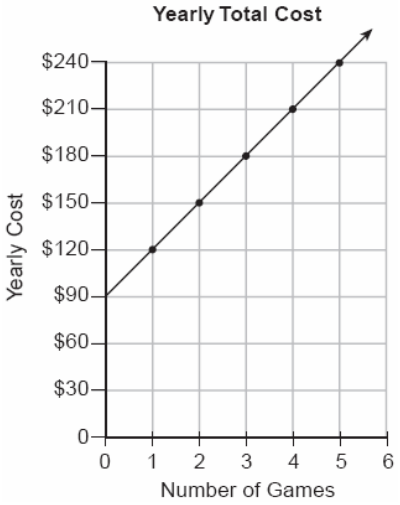
[C] (6,2) [D] (-1,1)

6. 089929a
Line ℓ contains the points (0,4) and (2,0). Show that the point (-25,81) does or does not lie on line ℓ.

7. 010024a
A straight line with slope 5 contains the points (1,2) and (3,*K*). Find the value of *K*. [The use of the accompanying grid is optional.]



8. 060025a
The accompanying graph represents the yearly cost of playing 0 to 5 games of golf at the Shadybrook Golf Course. What is the total cost of joining the club and playing 10 games during the year?



[1] B

[2] D

[3] A

[4] B

[5] B

[3] The student says the point does not lie on the line and an appropriate method is shown, such as slope of -2 does not work with the new point $(-25,81)$ and either other point (0,4) or (2,0), or accurately shows a graph where $(-25,81)$ is not on line ℓ.
[2] The student says the point does not lie on the line but gives an inappropriate explanation of slope.
or [2] The student tries to use slope concept but makes one computational mistake and gives an appropriate answer based on this mistake.
[1] Only the slope of -2 is found.
or [1] The correct diagram is drawn with no interpretation.
[0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously incorrect procedure.

[6]

[2] 12 and an appropriate explanation is given.
[1| The student uses an appropriate method, such as showing $\frac{k-2}{3-1}=5$ or graphing of a line through (1,2) having a slope of 5, but the correct answer is not found.
or [1] 12 and no explanation is given.
[0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously incorrect procedure.

[7]

[2] $390 or 390 and appropriate work is shown, such as a numerical table or the equation y = 30x + 90 or the expression 90 + 30N.
[1] Appropriate work is shown, but one computational error is made.
or [1] $300 or 300 or a slope of 30 but appropriate work is shown.
or [1] $390 or 390 but no work is shown.
[0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously incorrect procedure.

[8]