# Section 10-2: Writing an Equation Given Two Points

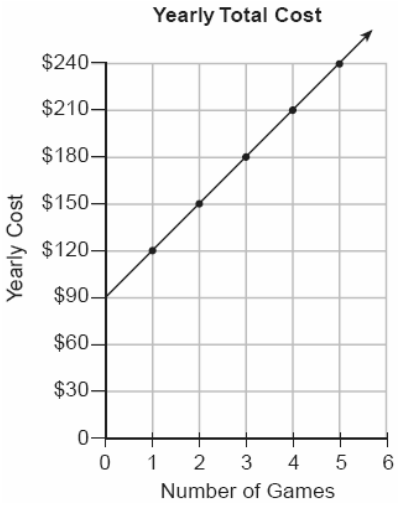
1. fall0713ia, P.I. A.A.35
   What is an equation for the line that passes through the coordinates (2,0) and (0,3)?

   [A] $y = -\frac{3}{2}x - 3$ [B] $y = -\frac{2}{3}x - 2$

   [C] $y = -\frac{3}{2}x + 3$ [D] $y = -\frac{2}{3}x + 2$

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

3. 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] C

[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 $\ell$.

[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.

[2]

[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.

[3]