**Grade 5 Leon’s Candy Bar Sales – Anchor Annotations**

**A1 Score 4**

Part A: The student correctly identified *The x axis* as the axis representing the number of candy bars sold. [1 point]

Part B: The student provided a correct ordered pair (*6,18*) by correctly interpreting the graph as each candy bar sold raised $3 and associating the *x*-coordinate of 6 with the corresponding *y*-coordinate of 18. [1 point]

Part C: The student provided the correct and complete explanation for why none of the coordinates on the graph can have a *y*-coordinate of 77 (*77 is not divisible by 3*). Since each candy bar sold raised $3, all *y*-coordinates must be divisible by three. [1 point]

Part D: The student provided the correct answer (*200*) with correct and complete support. The student first multiplied 240.0 [dollars] by 2.5 to find Leon’s goal of *$600*. The student further explained *since each candy bar is $3, all you have to do is 600 ÷ 3* is 200, which the student clearly identifies as the answer (*The lowest amount of candy bars Leon could sell to reach his goal is 200*). [1 point]

**A2 Score 4**

Part A: The student correctly identified *The x - axis* as the axis representing the number of candy bars sold. [1 point]

Part B: The student provided a correct ordered pair (*6,18*) by correctly interpreting the graph as each candy bar sold raised $3 and associating the *x*-coordinate of 6 with the corresponding *y*-coordinate of 18. [1 point]

Part C: The student provided the correct and complete explanation for why none of the coordinates on the graph can have a *y*-coordinate of 77 (*Because for every candy bar sold Leon makes 3 dollars and 3 is not a factor of 77*). Since each candy bar sold raised $3, all *y*-coordinates must be divisible by three. [1 point]

Part D: The student provided the correct answer (*200 candy bars*) with correct and complete support. The student first calculated how to find Leon’s goal of *$600* (*240 ÷ 2 = 120, 240 × 2 = 480, 480 + 120 = 600 dollars*). The student further explained *Leon would have to sell at the least 200 candy bars because 200 candy bars × $3 per bar = $600 total*. [1 point]

**A3 Score 4**

Part A: The student correctly identified *The X - axis* as the axis representing the number of candy bars sold. [1 point]

Part B: The student provided a correct ordered pair (*6,18*) by correctly interpreting the graph as each candy bar sold raised $3 and associating the *x*-coordinate of 6 with the corresponding *y*-coordinate of 18. [1 point]

Part C: The student provided the correct and complete explanation for why none of the coordinates on the graph can have a *y*-coordinate of 77 (*because 77 is not a multiple of three*). Since each candy bar sold raised $3, all *y*-coordinates must be divisible by three. [1 point]

Part D: The student provided the correct answer (*200 candy bars*) with correct and complete support. The student first multiplied $240 by 2.5 to find Leon’s goal of *$600*. The student then divided 600 by 3 to find *200* as the number of candy bars Leon needs to sell to reach his goal. [1 point]

**A4 Score 3**

Part A: The student correctly identified *the x axis* as the axis representing the number of candy bars sold. [1 point]

Part B: The student provided a correct ordered pair (*6,18*) by correctly interpreting the graph as each candy bar sold raised $3 and associating the *x*-coordinate of 6 with the corresponding *y*-coordinate of 18. [1 point]

Part C: The student provided the correct and complete explanation for why none of the coordinates on the graph can have a *y*-coordinate of 77 (*It’s not possible for any points on the grid to have a y corrdinent of 77 because 77 is not a multiple of 3*). Since each candy bar sold raised $3, all *y*-coordinates must be divisible by three. [1 point]

Part D: The student provided the correct answer (*200 candy bars*) with incorrect support. The student first multiplied $240 by 2.5 to find Leon’s goal of *$600*. The student then divided 600 by 3 to find *200* as the number of candy bars Leon needs to sell to reach his goal. However, the support is written as a run-on equation (*240 × 2.5 = 600 ÷ 3 = 200*) and does not earn any credit. [0.5 point]

**A5 Score 3**

Part A: The student correctly identified *the x - axis* as the axis representing the number of candy bars sold. [1 point]

Part B: The student provided a correct ordered pair (*6,18*) by correctly interpreting the graph as each candy bar sold raised $3 and associating the *x*-coordinate of 6 with the corresponding *y*-coordinate of 18. [1 point]

Part C: The student provided an incorrect explanation for why none of the coordinates on the graph can have a graph can have a *y*-coordinate of 77 (*It isn’t possible…because the graph doesn’t reach high enough to that also because it is an odd number. the pattern goes by twos and twos are even*).  Each candy bar sold raised $3, so the *y*-coordinates increase by three for each candy bar sold, not two. [0 points]

Part D: The student provided the correct answer (*200 candy bars*) with correct and complete support. The student first multiplied $240 by 2.5 to find Leon’s goal of *$600*. The student then divided 600 by 3 to find *200* as the number of candy bars Leon needs to sell to reach his goal. [1 point]

**A6 Score 3**

Part A: The student correctly identified *THE “X” AXiS* as the axis representing the number of candy bars sold. [1 point]

Part B: The student provided an incorrect answer (*6, 16*)*.* While the *x*-coordinate is correct (*6*), the *y*-coordinate of 16 is incorrect. The *y­*-coordinate is 18 for an *x*-coordinate of 6. [0 points]

Part C: The student provided the correct and complete explanation for why none of the coordinates on the graph can have a *y*-coordinate of 77 (*Because its “NOT” a multiple of 3*). Since each candy bar sold raised $3, all *y*-coordinates must be divisible by three. [1 point]

Part D: The student provided the correct answer (*He only needs to sell 200 candy bars!*) with correct and complete support. The student first multiplied 240 [dollars] by 2.5 to find Leon’s goal of *600* [dollars]. The student then divided 600 by 3 to find *200* as the number of candy bars Leon needs to sell to reach his goal. [1 point]

**A7 Score 2**

Part A: The student correctly identified *The x axis* as the axis representing the number of candy bars sold. [1 point]

Part B: The student provided a correct ordered pair (*6,18*) by correctly interpreting the graph as each candy bar sold raised $3 and associating the *x*-coordinate of 6 with the corresponding *y*-coordinate of 18. [1 point]

Part C: The student provided an incorrect explanation for why none of the coordinates on the graph can have a *y*-coordinate of 77 (*To have a y coordinate of 77, you would have to multiply by a decimal. Since Leon charges $3.00 a candy bar, that’s not where the decimal would come from unless he started charging something odd, or he would have to start selling halves of candy bars*). Each candy bar sold raised $3, so the *y*-coordinates increase by three for each candy bar sold. [0 points]

Part D: The student provided an incorrect answer (*100*) with incorrect support (*$240 x 2.5 = $600 ÷ 6 = 100*) in the form of a run-on equation. Additionally, the student incorrectly used 6 as the divisor instead of 3. [0 points]

**A8 Score 2**

Part A: The student correctly identified *Axis x* as the axis representing the number of candy bars sold. [1 point]

Part B: The student provided an incorrect answer (*6, 17*)*.* While the *x*-coordinate is correct (*6*), the *y*-coordinate of 16 is incorrect. The *y­*-coordinate is 18 for an *x*-coordinate of 6. [0 points]

Part C: The student provided an incorrect explanation for why none of the coordinates on the graph can have a *y*-coordinate of 77 (*it cannot go to y coordinate 77 because the graph only shows up to 20*). [0 points]

Part D: The student provided the correct answer (*200 candy bars*) with correct and complete support. The student first multiplied 240 [dollars] by 2.5 to find Leon’s goal of *600$*. The student then divided 600 by 3 to find *200* as the number of candy bars Leon needs to sell to reach his goal. [1 point]

**A9 Score 1**

Part A: The student provided an incorrect answer [ordered pair (*5,12*)]. The *x*-axis is not identified as the axis representing the number of candy bars sold. [0 points]

Part B: The student provided an incorrect answer (*6, 19*). While the *x*-coordinate is correct (*6*), the *y*-coordinate of 19 is incorrect. The *y*-coordinate is 18 for an *x*-coordinate of 6. [0 points]

Part C: The student provided a correct and complete explanation for why none of the coordinates on the graph can have a *y*-coordinate of 77 (*Its not possible because there is a remainder when you divide 77 ÷ 3 so it wouldn’t be possible*). Since each candy bar sold raised $3, all *y*-coordinates must be divisible by three. [1 point]

Part D: The student provided the correct answer (*200 candy bars*) with incorrect support. The student first multiplied $240 by 2.5 to find Leon’s goal of *$600*. The student then divided 600 by 3 to find *200* as the number of candy bars Leon needs to sell to reach his goal. However, the support is written as a run-on equation (*240 × 2.5 = 600 ÷ 3 = 200*) and does not earn any credit.[0.5 point]

**A10 Score 1**

Part A: The student correctly identified *the x axis* as the axis representing the number of candy bars sold. [1 point]

Part B: The student provided an incorrect answer (*3, 0*). [0 point]

Part C: The student provided an incorrect explanation for why none of the coordinates on the graph can have a *y*-coordinate of 77 (*because the y axis only goes up to 20*). [0 points]

Part D: The student provided an incorrect answer (*10*) with incorrect support (*because 240 + 10 = 250 or 2.5*). [0 points]

**A11 Score 0**

Part A: The student provided an incorrect answer [ordered pair (*4,12*)]*.* The answer provided is a plotted coordinate on the graph; however, the *x*-axis is not identified as the axis representing the number of candy bars sold. [0 points]

Part B: The student provided an incorrect ordered pair (*6,16*). While the *x*-coordinate is correct (*6*), the *y*-coordinate of 16 is incorrect. The *y*-coordinate is 18 for an *x*-coordinate of 6. [0 points]

Part C: The student provided an incorrect explanation for why none of the coordinates on the graph can have a *y*-coordinate of 77 (*because on the y-coordinate there isn’t even a number 77 on it*). [0 points]

Part D: The student provided an incorrect answer (*around 100*) with no support. [0 points]

**A12 Score 0**

Part A: The student provided an incorrect answer (*3$*)*.* The *x*-axis is not identified as the axis representing the number of candy bars sold. [0 points]

Part B: The student provided the incorrect ordered pair (*6, 12*). While the *x*-coordinate is correct (*6*), the *y*-coordinate of 12 is incorrect. The *y*-coordinate is 18 for an *x*-coordinate of 6. [0 points]

Part C: The student provided an incorrect explanation for why none of the coordinates on the graph can have a *y*-coordinate of 77 (*Because we don’t need the y coordinate of 77*). [0 points]

Part D: The student provided an incorrect answer (*225*) with incorrect support (*240 – 2.5 = 225*)*.* The 240 should have been multiplied by 2.5, not 2.5 subtracted from 240. Additionally, the step (600 ÷ 3) is not provided. [0 points]