HW #111 - Review for Test #102 -- Answer Key

***Here’s what you are supposed to do – READ THIS CAREFULLY***

1. Work all problems on notebook paper, showing your work as you should do on all assignments.
2. Go to Mr. Warner’s web site at www.warneralgebra.weebly.com and use the key there to check the assignment as you would check any assignment. There are 20 points possible. Write your score (out of 20) at the top of your paper.
3. Now that you have the answers to the problems, go back and re-work any problems that you missed.
4. When you arrive in class on test day, this assignment needs to be graded and ready to hand in.
5. It is strongly advised that you begin this review the day that it is assigned and complete it as early as possible so that you have sufficient time to get help on any problems with which you have difficulty.

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| 1) | 2) discrete | | 3) continuous | 4) discrete |
| 5) Ind: x = # of hours, Dep: *f(x)* = total cost,  Function Rule: , D: {0, 1, 2, 3, 4, ….8},  R: {35, 60, 85, 110, 135, ….235}, 5 hours, discrete | | | | |
| 6) Ind: x = # of hours, Dep: *f(x)* = height of candle,  Function Rule: , D: {}, R: {},  Nine inches, continuous | | | | |
| 7) | | 8) *x* = -5 | | |
| 9) a) Total cost is a function of number of classes  b) IND = x = number of classes taken  DEP = f(x) = total cost  c) D: {0, 1, 2, 3, 4,……..8}  R: {8, 12.50, 17, 21.50, 26, ……..44}  d) m = $4.50 | | 10) a) Limo service charges are a function of mileage used  b) IND = x = mileage used  DEP = f(x) = charges  c) D: { 0 ≤ x ≤ 100 }  R: { 50 ≤ y ≤ 250 }  d) m = $2.00 | | |

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| Lines 11 - 13 | *x*-int | | *y*-int | | | Slope | | |  |
| 11) |  | |  | | |  | | |  |
| 12) | None | |  | | | 0 | | |  |
| 13) |  | |  | | |  | | |  |
| 14) yes, because you can rewrite the equation y = -½, which is a linear function. | | | | 15) yes, linear because  is constant. (m = -⅓) | | | | | |
| 16)   |  |  | | --- | --- | | *x* | *f(x)* | | -3 | 7 | | 0 | 4 | | 2 | 2 | | 9 | -5 | | | | | | | | | | |
| 17) Is a function, each x-value is used only once  D: {2, 5, 8, 11, 12}  R: {0, 5, 8, 14} | | 18) not a function, x-values repeat  D: {4}  R: {-1, -2, -3}  18a) undefined | | | 19) Is a function, each x-value is used only once  D: {-2, 0, 1, 2}  R: {4, 0, 2} | | | 20) is not a function, does not pass the VLT  D: {}, R: {} | |
| 21) m = -¼ | | 22) m = 0 | | | | | 23) | | |
| 24) a) y = 5x  b) y-intercept (0, 0); x-intercept (0, 0); means that if you  sell zero T-shirt, the price is zero dollars.  c) slope is five; means that each T-shirt costs $5.00  d) *f(60) = 300*; means that if you sell 60 T-shirts the  price is $300.00 | | | | | | | | | |