Grade 8 Week 26 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Homework: Monday, March 6, 2017**

***TRY YOUR BEST! NO WORK NO CREDIT! ☺☺***

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| Isaac's television is 25 inches wide and 18 inches high. What is the diagonal size of Isaac's television? Round to the nearest tenth if necessary. (Pythagorean theorem) | CCSS_C3_Ch5_L6_Skillsa.tifHow far apart are the spider and the fly? |
| Graph the function: y = 1/4x + 2  CCSS_C3_Ch5_L7_Skillsb.tiffWhat is the y-intercept/starting point? \_\_\_ | CCSS_C3_Ch4_L7_HW.jpgThe graph shows a state’s minimum wage from 2005 to 2012. Would you descrive the yearly increase as linear or non-linear? Explain your reasoning. |
| **SCHOOL DANCE** The sign below indicates the cost of attending the big dance. In all, $320 was made. This can be represented by the function 2*x* + 5*y* = 320. Find the *x*- and *y*-intercepts. What do they represent?   |  |  | | --- | --- | | **Dance Ticket Prices** | | | **Fr./Soph.** | $2 | | **Jr./Sr.** | $5 | | Janette’s weekly salary can be represented by the equation *y* = 500 + 0.4*x*, where *x* is the dollar total of her sales for the week. Identify the slope and *y*-intercept of the graph of the equation and explain what each represents.  Slope: \_\_\_\_\_  What does the slope represent?  Y-intercept: \_\_\_\_  Write the y intercept as a point \_\_\_\_  What does the y-intercept represent? |
| Area of a circle can be determined using the formula: | What is the value of the following? Write your answer as an improper fraction in simplest form. |

**Homework: Tuesday, March 7, 2017**

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| The distance from Jonestown to Maryville is 180 miles, the distance from Maryville to Elm City is 300 miles, and the distance from Elm City to Jonestown is 240 miles. Do the three towns form a right triangle? Why or why not? (Use the Pythagorean Theorem. Draw a picture to help you understand the question if necessary). | Your small business makes greeting cards and sells them online. Each card costs $2 in materials and labor, and you have monthly fixed costs of $125 for advertising. If your total costs last month were $635, how many cards did you make? \_\_\_\_\_\_  What is your slope? \_\_\_\_\_\_  What is your y-intercept as a point? \_\_\_\_\_\_\_\_  Write an equation to represent your costs  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| The table shows the cost of long distance calls as a function of the number of minutes used. Is the cost a linear or nonlinear function of the number of minutes used? **Explain**.   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Number of Minutes** | 40 | 80 | 120 | 160 | 200 | | **Cost ($)** | 4.00 | 8.00 | 12.00 | 16.00 | 20.00 | | Jack bought *x* picks costing $30 each and *y* shovels costing $40 each. In all he spent $240.  **a.** Write a function to represent this situation.  **b.** What are the *y*-intercept of the function?  **c.** What do the y-intercept represent? |
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**Homework: Wednesday, March 8, 2017**

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| **CCSS_C3_Ch5_L7_Skillsa.tif**Find the distance between each pair of points using the Pythagorean theorem. Round to the nearest tenth if necessary. | Solve :  4(3z − 2) = 9z − 7  Solve :  5p − 17 = 2(2p − 7) |
| **Find the perimeter of the figure below.** | The center of the circle is at (2, -3). What is the area of the circle? |
| An archaeologist at a dig sets up a coordinate system using string. Two similar artifacts are found—one at position (1, 4) and the other at (5, 2). How far apart were the two artifacts? Round to the nearest tenth of a unit if necessary. |  |

**Homework: Thursday, March 9, 2017**

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| Create a function table for the equation. (Hint: Use your own x-values for the inputs.)  *f*(*x*) = 3*x* + 4   |  |  |  | | --- | --- | --- | | ***x*** | **3*x* + 4** | ***f*(*x*)** | |  |  |  | |  |  |  | |  |  |  | |  |  |  | | State your domain and range from question #1.  Domain:  Range:  Graph the function from question #1. CCSS_C3_Ch5_L7_Skillsb.tiff |
| Graph the ordered pairs and then find the distance between them. (–3, 0), (3, –2) CCSS_C3_Ch5_L7_Skillsb.tiff | Find the composite area. |
| The equation *y* = 0.2*x* + 3.5 can be used to find the amount of accumulated snow *y* in inches *x* hours after 5 P.M. on a certain day. Identify the slope and *y*- intercept of the graph of the equation and explain what each represents.  Slope: \_\_\_\_\_\_\_\_  What does the slope represent?  Y-intercept: \_\_\_\_ Write the y-intercept as a point. \_\_\_\_\_\_\_\_  What does the y-intercept represent? | Mel is 3 years older than Rahfat and Aurelio is twice as old as Mel. The sum of their ages is 57. How old is Mel? |
| **CCSS_C3_Ch5_L7_Skillsa.tif**Find the distance between each pair of points using the Pythagorean theorem. Round to the nearest tenth if necessary. | If the length around the circle is called the circumference, find the length of the circle.  Recall: d = 2 x r |