Grade 8 Week 25 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Homework: Monday, January 26, 2014**

***TRY YOUR BEST! SHOW ALL OF YOUR WORK! ☺☺ NO WORK! NO CREDIT!***

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| Find the value of x in each triangle. | In the figure, line *m* is parallel to line *n*. If *m*∠ 3 = 7*x* – 10 and *m*∠6 = 5*x* + 10, What is the measure of ∠3 and ∠6?  CCSS_C3_Ch5_L1_PSc.tif **(Hint: What is the relationship between angles 3 & 6?)** |
| **Graph each function.** *y* = 2*x*  CCSS_C3_Ch4_L4_HW1.jpg | **Graph each function.**  *y* = *x* – 4  CCSS_C3_Ch4_L4_HW1.jpg |
| A fitness instructor exercises about 15 hours per week. Write an equation to find the total number of hours h the instructor exercises in any number of weeks w. How many hours will she exercise in 9 weeks?   |  |  | | --- | --- | | **Weeks, *w*** | **Total**  **Hours, *h*** | | 1 | 15 | | 2 | 30 | | 3 | 45 | | 4 | 60 | | For every computer that is sold, Kendall receives $250 in commissions. The amount of commissions that Peter receives can be represented by the function *y* = 225*x* where *y* is his commission and *x* is the number of computers sold. How much more does Kendall receive in commissions than Peter if they both sell 5 computers? |

**Homework: Tuesday, January 27, 2014**

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| While at the music store, Drew bought 5 CDs, all at the same price. The tax on his purchase was $6, and the total was $61. What was the price of each CD? | Translate each sentence into an equation.   * Three more than four times a number is 15      * One less than four times a number is 11 |
| The graph shows the amount of money the Zimmerman family spends on movies each month. Write an equation to find the total amount of money c spent on movies in any number of months m. Use the equation to determine how much they will spend on movies in one year.  CCSS_C3_Ch4_L1_Skills_1.jpg | A new car gets 33 miles per gallon of gas. The graph shows the number of miles *y* that an older car gets per gallon *x* of gas. Compare the miles per gallon for each car. CCSS_C3_Ch4_L5_PS2.jpg |
| A real estate company sells 8 houses per month. Write an equation to find the total number of hours h sold in any number of months m. How many houses are sold in 15 months? | Find the function value: *f*(9) if *f*(*x*) = *x* – 8 |

**Homework: Wednesday, January 28, 2014**

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| Solve and check your solution:  5*c* – 15 = 2*c* + 6    14 + 3*n* = 5*n* – 6 | The Lone Star Shipping Company charges $14 plus $2 a pound to ship an overnight package. Discount Shipping Company charges $20 plus $1.50 a pound to ship an overnight package. For what weight is the charge the same for the two companies? (HINT: Write an expression for each company and then set them equal to each other.) |
| Find the missing side length using Pythagorean theorem. | How far above the ground is the balloon? |
| What is the **perimeter** of a right triangle if the hypotenuse is 15 centimeters and one of the legs is 9 centimeters? (draw the triangle) | Tina measures the distances between three cities on a map. The distances between the three cities are 45 miles, 56 miles, and 72 miles. Do the positions of the three cities form a right triangle? (Draw a picture and fill it in with the measurements if you are confused.) |

**Homework: Thursday, January 29, 2014**

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| Troy drove 8 miles due east and then 5 miles due north. How far is Troy from his starting point? Round the answer to the nearest tenth of a mile. | A pool table is 8 feet long and 4 feet wide. How far is it from one corner pocket to the diagonally opposite corner pocket? Round to the nearest tenth. |
| Carlos is building a screen door. The height of the door is 1 foot more than twice its width. What is the width of the door if it is 7 feet high? | Solve system using the substitution method.  y = 9  y = 9x - 9 |
| Solve and check your solution:  4(2 + 3*c*) = 56  63 = –3(1 – 2*n*) | Currently, 96 members participate in the morning workout, and this number has been increasing by 2 people per week. Currently, 80 members participate in the afternoon workout, and this number has been decreasing by 3 people per week. In how many weeks will the number of people working out in the morning be double the number of people working out in the afternoon? |