Name: Weekly Math Homework - 23 Teacher:

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| **Monday (wk 23)** | **Tuesday (wk 23)** | **Wednesday (wk 23)** | **Thursday (wk 23)** |
| 1. Simplify:  (-3n +4mn -5m) -(mn +5m -6n) | 1. Simplify:  (-2x +7y -4xy) + (-xy -5y -6x) | 1. Simplify:  -(-7rs +3r -s) + (5r -3s -6rs) | 1. Simplify:  -(8q - p -9pq) - (-3p +4pq -5q) |
| 2. Draw and label the length and width of **3** possible rectangles with an area of 6x + 24. | 2. Draw and label the length and width of **3** possible rectangles with an area of 15x + 45. | 2. Draw and label the length and width of **3** possible rectangles with an area of 8x + 40. | 2. Draw and label the length and width of **3** possible rectangles with an area of 10x + 20. |
| 3. Which of the expressions is equivalent to -2x + 5 - 9? Write true or false for each. Show work for each answer choice.  A. -2(x + 2)  B. 2(-x -4)  C. 2(-x -2)  D. -x -2 -x -2 | 3. Which of the expressions is equivalent to 8x + 12 +4? Write true or false for each. Show work for each answer choice.  A. 4(2x +4)  B. 8(x + 2)  C. 8( x + 4)  D. 8x + 16 | 3. Which of the expressions is equivalent to 10x -15 - 5? Write true or false for each. Show work for each answer choice.  A. 5(2x + 4)  B. 10 (x - 2)  C. 2(5x - 10)  D. 5x -10 +5x -10 | 3. Which of the expressions is equivalent to 9x -15 - 3? Write true or false for each. Show work for each answer choice.  A. 3(x +6)  B. 9x - 18  C. 3 (x -6)  D. 9(x -2) |
| 4. Which of the expressions is equivalent to 3(-4x +6)? Write true or false for each.  A. -6(2x - 3)  B. 2(-6x +9)  C. -12x + 18  D. -3(4x - 6) | 4. Which of the expressions is equivalent to -6(-5x+ 2)? Write true or false for each.  A. 3(-10x -4)  B. 30x -12  C. -3(-10x - 4)  D. 10(3x - 1) -2 | 4. Which of the expressions is equivalent to 9(-2x - 3)? Write true or false for each.  A. 3(-6x -9)  B. 18x + 27  C. -9(2x + 2) -9  D. -18x -27 | 4. Which of the expressions is equivalent to -(4x - 8)? Write true or false for each.  A. -4x + 8  B. -4(x -2)  C. 4(-x + 2)  D. 2(-2x -4) |
| 5. Jack, Josh, Jason, and Kris are all sharing the cost of renting an RV for the week. The cost is $850 for the week.   * Jack will pay 30% of the cost * Josh will pay .15of the cost * Jason will pay 25% of the cost * Kris will pay the remainder   Tell how much money each will pay. | 5.Cory is opening a Tuxedo rental business. He doesn't know how much he needs to purchase, but he knows the cost of the items. This is shown in the table below.   |  |  | | --- | --- | | **Item** | **Cost** | | Jacket (x) | $75 | | Shirt (y) | $40 | | Tie (z) | $40 |   Which of the following expressions represent(s) Cory’s total cost to purchase his items? Explain each.  A. 75x +40( y + z)  B. 40(35x+ y + z)  C. 40(x + y + z) + 35x | 5.Cory is opening a Tuxedo rental business. He doesn't know how much he needs to purchase, but he knows the cost of the items. This is shown in the table below.   |  |  | | --- | --- | | **Item** | **Cost** | | Jacket (x) | $75 | | Shirt (y) | $40 | | Tie (z) | $40 |   Which of the following expressions represent(s) Cory’s total cost to purchase his items? Explain each.  A. 75 + x + 40 + y + 40 + z  B. 75x + 40y + 40z  C. 40(x + y + z) + 75x | 5. Jack, Josh, Jason, and Kris are all sharing the cost of renting an RV for the week. The cost is $1100 for the week.   * Jack will pay 25% of the cost * Josh will pay .20of the cost * Jason will pay 30% of the cost * Kris will pay the remainder   Tell how much money each will pay. |
| 6. Amy and Jason went out for dinner. Their dinner cost $30, plus they needed to pay a 15% tip. Choose all expressions that will show a way to calculate the **TOTAL** cost including tip.  A. 30 + .15(30)  B. 1.15(30)  C. .15(30)  D. 30 + .10(30) + .05(30) | 6. Kathy went shopping to buy some new clothes. She needs to pay 8% sales tax on what she buys. Choose all expressions that will show a way to calculate the **TOTAL** cost including sales tax. (c=clothes)  A. 1.08c  B. c + .8c  C. .08c  D. c + .08c | 6. Joe makes $500 per week plus a 12% commission on all the shoes he sells at work. He sold $500 in shoes for the week. Choose the expressions that will show a way to calculate his TOTAL weekly income with commission.  A. .12(500)  B. 500 + .12(500)  C. 500+ .10(500) + .02(500)  D. 1.12(500) | 6. Rachel just got a 5% raise at work. Choose all expressions that will show a way to calculate her **TOTAL** pay including her raise. (p= current pay)  A. .5p  B. p + .05p  C. 1.05p  D. p + .5p |
| 7. Solve: (Show ALL work!)  A.  B. 5x + 6 = -9 | 7. Solve: (Show ALL work!)  **A.** -6= -16 + 2m **B.** | 7. Solve: (Show ALL work!)  A. -2x -4 =36 B. | 7. Solve: (Show ALL work!)  A. -12 = -4m - 4 B. |
| 8.Write and solve an equation that represents this situation.  1  1  1  1  1  x  x  x  1  1  1 | 8.Write and solve an equation that represents this situation.  1  1  1  1  1  1  x  x  1  1  1 | 8.Write and solve an equation that represents this situation.  1  1  1  1  1  1  1  x  x  x  1  1  1 | 8.Write and solve an equation that represents this situation.  1  1  1  1  1  x  x  1  1  1 |
| 9. As a salesperson, Jonathan is paid $50 per week plus $5 for each item he sells. This week, he wants to earn at least $100. Write, solve and graph an inequality that represents this situation. | 9. Brenda has $500 in her bank account. She withdraws $40 each week. If she wants to maintain a balance of at least $180, how many weeks can she withdraw money? Write, solve, and graph the inequality for this situation. | 9. At most, Kyle can spend $50 on sandwiches and chips for a picnic. He already bought chips for $6 and will buy sandwiches that cost $4 each. Write, solve, and graph the inequality for this situation. | 9. Connor went to the county fair with a $28 in his pocket. He bought a hot dog and drink for $4, and then wanted to spend the rest of his money on ride tickets, which cost $2 each. Write, solve, and graph the inequality for this situation. |