## Chapter 2 Review

- 1. Know all of the properties that we have discussed in class so far.
- 2. Know the classifications of real numbers
- 3. Know and be able to execute the order of operations.
- 4. Know what coefficients, variables, and constants are.
- 5. Be able to create an equation from a word problem and solve.
- 6. This test will include one-step, two-step, multi-step, and literal equations.

1) Find three consecutive integers whose sum is -30	2) Solve 4K+mn=n-3 for n
3) To find the average number of points per game a player scores, use the formula <i>Points Per Game</i> = $\frac{TotalPoints}{Games}$ . Find the number of games a player has played if she has scored a total of 221 points and is averaging 17 points per game.	4) Joan drives 333.5 miles before she has to buy gas. Her car get 29 miles per gallon. How many gallons of gas did the car start out with?
5)Solve $\frac{c}{d} + 2 = \frac{f}{g}$ for c	6) Solve $3ab - 2bc = 12$ for c
7) Stan is purchasing sub-flooring for a kitchen he is remodeling. The area of the floor is 180 ft <sup>2</sup> and the width of the kitchen is 12 ft. What is the length of the sub-floor?	8) Solve $z = (\frac{x+y}{3})w$ for y
9) Solve $-3(m-2n) = 5$ for m	10) Solve A= $\frac{1}{2}bcd + bc$ for d
11) What is the width of a rectangle with length 14 cm and area 161 cm <sup>2</sup> . Use 3.14 for $\pi$	12) General admission tickets to the fair cost \$3.50 per person. Ride passes cost an additional \$5.50 per person. Parking costs \$6 for the family. The total cost for ride passes, parking, and admission was \$51. How many people in the family attended?
<ul><li>13) Five times a number decreased by</li><li>18 minus 4 times the same number is</li><li>-36. What is the number?</li></ul>	14) $6(3N+5) = 66$
<b>15)</b> $3(4y - 8) = 12$	16) - 5(x - 3) = -25
17) $42 = 3(2 - 3h)$	18) - 10 = 5(2w - 4)

<b>19)</b> $3p - 4 = 31$	20) - 15 = 5(3q - 10) - 5q
<b>21)</b> $x - 2(x + 10) = 12$	22) Angela ate at the same restaurant 4 times. Each time she ordered a salad and left a \$5 tip. She spent a total of \$54. Write and solve an equation to find the cost of each salad.
$23) \ \frac{x}{3} - \frac{1}{2} = \frac{3}{4}$	$24)  \frac{g}{5} + \frac{5}{6} = 6$
<b>25)</b> $5 + \frac{2a}{-3} = \frac{5}{11}$	26) The sum of three integers is 228. The second integer is 1 more than the first, and the third integer is 2 more than the first. Write an equation to determine the integers. Solve your equation. Show your work.
27) Shirley is going to have the exterior of her home painted. Tim's Painting charger \$250 plus \$14 per hour. Colorful Paints charges \$22 per hour. How many hours would the job need to take for Tim's Painting to be the better deal?	28) Tracey is looking at two different travel agencies to plan her vacation. ABC Travel offers a plane ticket for \$295 and a rental car for \$39 per day. M&N Travel offers a plane ticket for \$350 and a rental car for \$33 per day. What is the minimum number of days that Shirley's vacation should be for M&N Travel to have the better deal?
<b>29)</b> $7(h+3) = 6(h-3)$	30) - (5a+6) = 2(3a+8)
<b>31)</b> $-2(2f-4) = -4(-f+2)$	<b>32)</b> $3w - 6 + 2w = -2 + w$
33) - 8x - (3x + 6) = 4 - x	<b>34)</b> $14 + 3n = 8n - 3(n - 4)$
35) Determine if the equation is an identity, no solution, or one solution: 4(3m+4) = 2(6m+8)	36) Determine if the equation is an identity, no solution, or one solution: 5x + 2x - 3 = -3x + 10x
37) Determine if the equation is an identity, no solution, or one solution: $6.8 - 4.2B - 5.6B - 3$	38) Determine if the equation is an identity, no solution, or one solution: $\frac{1}{3} + \frac{2}{3}m = \frac{2}{3}m - \frac{2}{3}$
39) Determine if the equation is an identity, no solution, or one solution: -2(5.25 + 6.2x) = 4(-3.1x + 2.68)	40) $\frac{3}{5}(p-3) = -4$