Mr. Gmerek

Algebra 2

Problem Set 1.3

1. What does it mean to solve?
2. Solve: x + 4 = 3
   1. How can you check your answer to make sure it is correct?
3. Solve: x + 7



1. What is the opposite of 7?



* 1. Define **opposite**.

1. Define inverse operations.



* 1. Why do we use inverse operations?
  2. Why don’t we simply say “opposite operations?”

1. Write an equation to represent the following situation:
   1. You borrowed $15 from your friend and paid some of the money back. Unfortunately, you don’t remember how much you paid back! You trust your friend and he says you now owe him $3. Write an equation to represent the amount of money you have already paid back to your friend.
   2. Solve the equation you created.
2. Solve:



* 1. 92 = 47 + x
  2. d – 13.7 = 19.45
  3. p + 9 = 15
  4. 11 = -f + 8

1. Define reciprocal.
2. In a school survey,  of Bradley students said they prefer Math class in the afternoon as opposed to the morning. There are 1500 students at Bradley.
   1. Write an equation to show how many students prefer to have Math class in the afternoon.
   2. Solve the equation you created.
3. Solve and check your answers:



* 1. 7t = 56
  2. 75 = -5c
  3. 
  4. 



1. When solving equations, you have to undo operations that have already taken place. To do this, you must use inverse operations. Also, when solving equations, do the order of operations in reverse order (or, if you multiply or divide first, make sure you multiply or divide EVERY TERM on both sides of the equal sign).

Solve the following:

* 1. 
  2. 3x + 9 = 15 (try this one by dividing first, then do it again but subtract first!)
  3. 
  4. 14 = 28 + 9c
  5. 
  6.  (try this one by multiplying first, then do it again but add first!)



1. Don’t forget what we did on problem set 1.2, and solve these!
   1. y – 9 +3y = 15
   2. 6d +12 – 4d = 124
   3. 3(x – 9) + 12 = 14
   4. 
2. The perimeter of a rectangle is 175 in. The length of the rectangle is 5 times the width, w. Find the area of the rectangle.



1. Solve.



* 1. k + 19 = 3k – 45
  2. 3(m – 4) = 6(5 – m)
  3. -2(p + 18) + 45 = p + 4(13 – p)