This is just an additional practice worksheet. You must review all concepts we covered in the class reviewing your notes and homework.

Classifying Real Numbers **Name** _____

Circle all number sets to which the given numbers belong.

1. –4.7	*Natural*	*Whole*	*Integer*	*Rational*	*Irrational*
2. $\sqrt{36}$	*Natural*	*Whole*	*Integer*	*Rational*	*Irrational*
3. 0	*Natural*	*Whole*	*Integer*	*Rational*	*Irrational*
4. $\frac{1}{3}$	*Natural*	*Whole*	*Integer*	*Rational*	*Irrational*
5. $\sqrt{10}$	*Natural*	*Whole*	*Integer*	*Rational*	*Irrational*
6. .333….	*Natural*	*Whole*	*Integer*	*Rational*	*Irrational*
7. $\frac{12}{4}$	*Natural*	*Whole*	*Integer*	*Rational*	*Irrational*
8. $-(\frac{10}{2})$	*Natural*	*Whole*	*Integer*	*Rational*	*Irrational*
9. π	*Natural*	*Whole*	*Integer*	*Rational*	*Irrational*

Order of Operations -- PEMDAS

19. $18 \div 6 + 4 \times 15$

20. $2 - 20 \div 5 \times 3$

21. $(6 + 4)^2 + (11 + 10 \div 2)$

28. $(10 + 59 - 3^2) \div (24 - 4)$

29. $4 \times (12 \times 6 - 4^2) + 9$

30. $(19 - 8) \times (10 + 4) + 8^2$

Determine whether these numbers are rational or irrational.

1.	0.3	**2.**	$\sqrt{7}$
3.	$\sqrt{4}$	**4.**	0.8
5.	$3.\overline{51}$	**6.**	5/9
7.	1/6	**8.**	$\pi/2$
9.	-5	**10.**	$0.\overline{56}$
11.	0.1	**12.**	$\sqrt{25}$

Name the property shown by each statement:

1. $17 + 22 = 22 + 17$ _____
2. $12 \times 46 = 46 \times 12$ _____
3. $89 + 0 = 89$ _____
4. $89 \times 1 = 89$ _____
5. $89 \times 0 = 0$ _____
6. $(8 + 4) + 5 = 8 + (4 + 5)$ _____
7. $(43 \times 2) \times 5 = 43 \times (2 \times 5)$ _____

2. Simplify the following algebraic expressions:

a) $4m + 5c - 3m - 2c$

b) $6y - 8t - 7y + 3t$

c) $7j - f - 8j - 9f$

d) $9k + 4x - 4x + 3k$

e) $7m + 4n - m + n$

f) $-6d - 4a - 5d + 9a$

g) $9 - 5t + 3 + 6 - 8t$

h) $3 + 3g - 5g + 2 + g$

i) $2s + 4d - 3 + 3d - 2s + 7$

Evaluate each using the values given.

1) $n^2 - m$; use $m = 7$, and $n = 8$

2) $8(x - y)$; use $x = 5$, and $y = 2$

3) $yx \div 2$; use $x = 7$, and $y = 2$

4) $m - n \div 4$; use $m = 5$, and $n = 8$

7) $y + yx$; use $x = 15$, and $y = 8$

8) $q \div 6 + p$; use $p = 10$, and $q = 12$

13) $zy + 4y$; use $y = 5$, and $z = 2$

14) $b(a + b) + a$; use $a = 9$, and $b = 4$