

Name _____ Date _____

Worksheet 1

Name each set of real numbers as all natural numbers, all integers, or neither.

1. 5, 7, 18, 29

2. -2, 1, 3, 9

3. 0, 1, 2, 3

4. .5, 1, 1.5, 2, 2.5

5. -20, -21, -22

6. 1015, 1025, 1046

7. $1, \frac{1}{2}, 3, 5$

8. -1, 0, 1

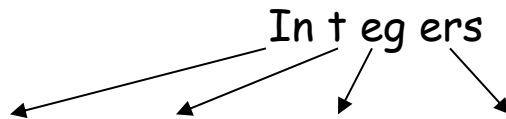
9. 253.5, 600.5, 3

10. 7, 12, -3, 0, 5

11. 14, 12, 110, 6

12. $\frac{1}{2}, .335, \sqrt{37}, 0$

13. Fill in the blanks to spell out the helpful integer phrase.



_____ and _____

14. When you teach a child how to count, which set of numbers do you use?

15. Which set of numbers includes every number in the world? _____

* Review

16. $-3 \times -9 =$

17. $\frac{1}{4} \div \frac{3}{5} =$

18. $10 + x = -19$

19. $\frac{49}{7} = x$

20. $3a = 99$

21. $\frac{1}{2} \cdot \frac{1}{2} =$

22. $\sqrt{121} =$

23. $\frac{1}{2}x = 32$

24. $12^2 =$

25. $3\frac{4}{7} \times 4\frac{3}{5} =$

26. $4^2 + (3 - 1) + 5(8 + 2) =$

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Worksheet 2

Name each real number as an integer or a natural number and then say whether it is rational or irrational. The first one is done for you.

- * 17 A rational, natural number and an integer.
- 1. -17
- 2. .34
- 3. .33
- 4. $\sqrt{4}$
- 5. $\sqrt{2}$
- 6. $-7/8$
- 7. 0
- 8. π
- 9. 100
- 10. $1/3$

Review pre-algebra by solving the following.

- 11. $3a = 27$
- 12. $\frac{1}{2}a = 5$
- 13. $-12 \times -12 =$
- 14. $-8^2 =$
- 15. $\sqrt{36} =$
- 16. $x - 5 = -10$
- 17. $8(6 + 3) =$
- 18. $(3 + 3) - 2^2 + (4 \times 6)(\sqrt{4}) =$

Fill in the blanks with the correct order of operations (PEMDAS).

- 19. _____, Exponents, _____, _____, Add, _____
- 20. $-\frac{5}{9} \div \frac{5}{6} =$
- 21. $\frac{7}{12} \times -\frac{8}{11} =$
- 22. $2\frac{7}{9} + 4\frac{4}{27} =$

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Worksheet 3

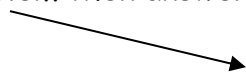
Name the variable in each problem.

1. $5a - 7 =$ _____
2. $a + 2 =$ _____
3. $5b =$ _____
4. $10a + 4a =$ _____
5. c _____

Name the coefficient of y in each problem.

6. $3y + 7 =$ _____
7. $4a - 2y =$ _____
8. $\frac{1}{2}y =$ _____
9. $y + 1 =$ _____
10. $abc + 6y =$ _____

Look at this problem then answer the following questions about it.



$$-8b + 3 =$$

11. Is the coefficient of b an integer? _____
12. Is the coefficient of b a natural number? _____
13. Is the coefficient of b an irrational number? _____
14. Is the number without a variable a rational number? _____
15. What is the variable? _____

Review.

16. $-\frac{4}{7} \times \frac{4}{7} =$

17. $-\frac{4}{7} \div \frac{4}{7} =$

18. $-\frac{4}{7} - \frac{4}{7} =$

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Worksheet 4

Name each of the following as either an expression or a term.

1. $4y$
2. abc
3. $12ab^2$
4. $3a + 4b$
5. $3a(5 + 2)$
6. $6y^2 + 8$
7. $\frac{1}{2}ab(3a)$
8. $4 + 3xyz$
9. $9a$
10. $d\pi$

Fill in the blanks with a word from your list that matches the description.

11. _____ A number set that includes all negative and positive whole numbers including zero.
12. _____ The set of numbers that we use to count.
13. _____ The set of numbers that contain every number.
14. _____ The type of numbers that can be written as a fraction.
15. _____ The type of numbers that cannot be written as a fraction.
16. _____ Terms hooked together with a plus or minus sign.
17. Are there any like terms in the problem below? If so, what are they?
 $7xy + abc + 4xy + 5abc + 7xy^2 =$

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Worksheet 5

Separate the following terms into their factors. The first one is done for you.

<u>Term/Expression</u>	<u>Factors</u>
1. $7y^3$	7 y y y
2. $3xy^2$	
3. $5x$	
4. a^4	
5. $11xy^2z$	
6. 3^3	
7. 7×2	
8. $8 + 5$	
9. $3a$	
10. $21a^3b^2$	
11. $(3 + 2)(4 + b)$	
12. 10^2	
13. $3(a + b)$	
14. $a(2 + a)$	
15. ab	

Solve the following problems.

16. $|8| + |-9| =$

17. $|-3| + |5| =$

18. $|7| - |-3| =$

19. $|-12| - |-5| =$

20. $|-25| + |5| =$

21. $|-9| + |3| + |-6| =$

22. $|-5| \times |9| =$

23. $|7| \times |-8| =$

24. $|-4| \times |4| =$

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Chapter 1 Review Test

Name each number as either a natural number, an integer, both or neither.

1. 5 2. -5 3. $\frac{1}{5}$ 4. $-\frac{1}{5}$ 5. 0

Name each number as rational or irrational.

6. $\frac{3}{8}$ 7. $\sqrt{49}$ 8. $\sqrt{2}$ 9. π 10. 2

Name the variable and the coefficient of each term.

11. $2a$ 12. b 13. $10x^2$ 14. $\frac{5}{8}m$ 15. πr^2

Name each of the following as either a term or an expression.

16. $3xy^2$ 17. $8a(3y)$ 18. $\sqrt{9} + \sqrt{7}$ 19. $6a + 12y$ 20. a

Look at the expression below. Circle all like terms.

21. $3a^2b^2 + 7ab - a^2b^2 + 4ab^2 - 7a - 6a^2b^2 + 5a^2b + 9a^2b^2c =$

List all the factors of the following terms.

22. $5ab$ 23. $7y^2$ 24. $11abc$ 25. $(5a + 3)(2a + 4)$ 26. $(a + b)^2$

Solve the following.

27. $|-9| =$ 28. $|8| - |-3| =$ 29. $|27| * |-2| =$