

Name key

Date _____

REVIEW 1.1,1.2,1.3,1.5,1.6
Alg 2 Trig G



Evaluate:

1. $[18 - (6 + 4)] \div 2$

4

2. $\frac{6 + 9 \div 3 + 15}{8 - 2}$

4

Evaluate each expression if $a = 8.2$, $b = -3$, $c = 4$, $d = -\frac{1}{2}$.

3. $\frac{c^2 - 1}{b - d}$

-6

4. $\frac{a}{d} + 6b - 5c$

-54.4

5. $b - c + 4 \div d$

-15

Name the set of numbers to which each number belongs:

	Real	Rational	Irrational	Integer	Whole	Natural
5.6	✓	✓				
-9	✓	✓		✓		
$\sqrt{15}$	✓		✓			
0	✓	✓		✓	✓	
9.57	✓	✓				
$\frac{8}{7}$	✓	✓				
$-\sqrt{49}$	✓	✓		✓		
20	✓	✓		✓	✓	✓

Simplify the expression:

6. $8(2.4x - 3.1y) - 6(1.5x + 2.4y)$
 $19.2x - 24.8y - 9x - 14.4y$

10.2x - 39.2y

7. $\frac{1}{5}(4h + 2k - 6h + 3k)$

$.8h + .4k - 1.2h + .6k$

-0.4h + k

Write an algebraic expression to represent each verbal expression:

8. the product of 3 and the sum of 11 and a number

$$3(11+n)$$

9. four times the square of a number increased by five times the same number

$$4n^2 + 5n$$

Write a verbal sentence to represent the equation:

10. $3n - 35 = 79$

35 less than the product of 3 and a number is 79

Solve the equation:

11. $7 - \frac{1}{2}x = 3$

$$x = 8$$

12. $5(4-x) = -10x$

$$4 - x = -2x$$
$$4 = -1x$$

$$x = -4$$

13. $2x + 75 = 102 - x$

$$3x = 27$$

$$x = 9$$

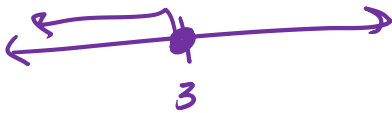
Solve and graph each inequality:

14. $7(7a-9) \leq 84$

$$7a - 9 \leq 12$$

$$7a \leq 21$$

$$a \leq 3$$



15. $2 + 3(m+5) \geq 4(m+3)$

$$2 + 3m + 15 \geq 4m + 12$$

$$3m + 17 \geq 4m + 12$$

$$5 \geq m$$



16. $18 < 4x - 10 < 50$

$$18 < 4x - 10 \quad 4x - 10 < 50$$

$$7 < x \quad \text{and} \quad x < 15$$



17. $5k + 2 < -13$ or $8k - 1 > 19$

$$5k < -15$$

$$8k > 20$$

$$k < -3 \quad \text{or} \quad k > 2.5$$

