

**NO CALCULATOR ON THIS QUIZ**1. Evaluate each expression for  $A = -6$   $B = -4$   $C = -2$ 

a.  $-B - AC$

b.  $B^2 + A - C$

2. Evaluate each expression for  $M = -5$   $N = -10$   $Q = 2$ 

a.  $2M^2 + NQ$

b.  $QN^2 \div (N + MQ)$

Simplify each.

3.  $|-5.4|$

4.  $|3 - 8|$

5.  $12 - |-5|$

6.  $|9| + |-5 + 2|$

Using these names: Rational Numbers, Irrational Numbers, Natural Numbers, Integers, Whole Numbers give the set(s) to which each belongs

7.  $-2.6$

8.  $\sqrt{9}$

9.  $-15$

10.  $\frac{2}{3}$

11.  $\frac{30}{3}$

12.  $\sqrt{11}$

Simplify each.

13.  $7 - 4 + 3 - 1$

14.  $2 \cdot 6 \div 2 \cdot 3$

15.  $30 - 5(6 - 2) + (4 - 1)^2$

16.  $7 + 2 \cdot 5$

17.  $4[1 + (5 - 3)^2] \div 2$

18.  $\frac{2 + 24 \div 3}{-6 + 1}$

Write a variable expression to **EXACTLY** model each statement.

19. The sum of a number and twelve.

20. The product of nine and a number.

21. Six less than a number.

22. The quotient of a number and ten.

23. The difference of a number and five.

24. Four more than eight times a number

Write an equation and define your variables to model each.

25. There are 7 days in a week. Write an equation for the number of days in an unknown number of weeks.

26. There are 60 seconds in a minute. Write an equation for the number of minutes in an unknown number of seconds.

27. Sam 5 CD's and Maryanne has 2 CD's. They both join the same music club to purchase CD's. They get a discount if they both buy the same number of CD's. If they always get the discount write an equation that shows how many CD's Maryanne has.

28.

# minutes reading	# of pages read
8	360
15	675
20	900
24	1080

29.

Tigers score	Angels score
5	12
12	19
18	25
27	34

## Alg 1 Quiz #2 REVIEW

## ANSWERS

1. a. -8    b. 12                      2. a. 30    b. -10

3. 5.4                      4. 5                      5. 7                      6. 12

7. Rational                      8. Rational, Integer, Whole #, Natural #                      9. Rational, Integer

10. Rational                      11. Rational, Integer, Whole #, Natural #                      12. Irrational

13. 5                      14. 18                      15. 19

16. 17                      17. 10                      18. -2

For 19 to 24, variables can vary.

19.  $R + 12$                       20.  $9Q$                       21.  $Z - 6$                       22.  $\frac{A}{10}$

23.  $E - 5$                       24.  $8G + 4$

Write an equation and define your variables to model each. For 28 and 29 there may be other equations to write. Ask me if you have one that doesn't match what I give.

25. EQ:  $D = 7W$      $D = \# \text{ of days}$      $W = \# \text{ of weeks}$

26. EQ:  $M = \frac{S}{60}$      $M = \# \text{ of minutes}$      $S = \# \text{ of seconds}$

27. EQ:  $M = S - 3$      $M = \# \text{ CD's that Maryanne has}$      $S = \# \text{ CD's that Sam has}$

28. EQ:  $P = 45M$  or  $M = \frac{P}{45}$  or  $\frac{P}{M} = 45$ ;     $M = \# \text{ minutes reading}$      $P = \# \text{ pages read}$

29. EQ:  $A = T + 7$  or  $T = A - 7$  or  $A - T = 7$ ;     $A = \text{Angles score}$      $T = \text{Tigers score}$