

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. $QN^2 \div (N + MQ)$ c. $N - |QM^2 - N|$

Simplify each.

3. $|-5.4|$ 4. $|8 - 3|$ 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. $4[1 + (5 - 3)^2] \div 2$

16. $7 + 2 \cdot 5$ 17. $30 - 10((6 - 2) + (4 - 1)^2) + 1$ 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 a number and nine.
 21. Six less than a number. 22. The quotient of ten and a number.
 23. The difference of five and a number. 24. Four more than eight times a number
 25. Eight times the quantity a number minus three.

Write an equation and define your variables to model each.

26. There are 7 days in a week. Write an equation for the number of days in an unknown number of weeks.
 27. There are 60 seconds in a minute. Write an equation for the number of minutes in an unknown number of seconds.
 28. Sam has 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.

29.

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

30.

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

31. Stewart was given 30 stamps for his birthday and plans to buy 4 stamps each month. Write an equation to model the number stamps Stewart will have after an unknown number of months. Define your variables.

32. There are six Cokes in a pack and 12 Cokes in a case. Write an equation for the number of Cokes you'll have if you purchase an unknown number of packs and cases. Define your variables.

Alg 1 Quiz #2 REVIEW

ANSWERS

1. a. -8 b. 12 2. a. 30 b. -10 c. -70

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. 10

16. 17 17. -99 18. -2

For 19 to 24, variables can vary.

19. $R + 12$ 20. Q^9 21. $Z - 6$ 22. $\frac{10}{A}$ 23. $5 - E$ 24. $8G + 4$ 25. $8(m - 3)$

Write an equation and define your variables to model each.

26. EQ: $D = 7W$ $D = \# \text{ of days}$ $W = \# \text{ of weeks}$ 27. EQ: $M = \frac{S}{60}$ $M = \# \text{ of minutes}$ $S = \# \text{ of seconds}$ 28. EQ: $M = S - 3$ $M = \# \text{ CD's that Maryanne has}$ $S = \# \text{ CD's that Sam has}$ 29. EQ: $w = 45M$ or $M = \frac{w}{45}$ or $\frac{w}{M} = 45$; $M = \# \text{ minutes reading}$ $w = \# \text{ words read}$ 30. EQ: $A = T + 7$ or $T = A - 7$ or $A - T = 7$; $A = \text{Angles score}$ $T = \text{Tigers score}$ 31. EQ: $T = 4m + 30$ $T = \text{total \# of stamps}$ $m = \# \text{ months}$ 32. EQ: $6p + 12c = T$ $T = \text{total number of Cokes}$ $p = \# \text{ of packs}$ $c = \# \text{ of cases}$