

NAME:

UNIT 1 TEST STUDY GUIDE



1. Put a check all the names that apply for the number.

	Natural	Whole	Integer	Rational	Irrational
0					
$\sqrt{7}$					
$\frac{5}{7}$					

2. True or False: Integers are closed under division. If FALSE, provide a counterexample.

(3-6) Order of Operations: Simplify the expressions.

3. $7 \times 8 + 5 \div 5$

4. $[8 + (5 - 3)^2] - 3$

5. $\frac{30 - 5 \times 3}{20 \div 4}$

6. $36 \div 6 - 2^2 \times 5$

(7-10) Solving Linear Equations: Solve the equation for the given variable. Check your answer! ☺

7. $-9x + 1 = -80$

8. $-2 = 2 + \frac{v}{4}$

9. $2x - 2 = 4x + 6$

10. $3x - 2(3x + 3) = 9 - 3x - 15$

(11-14) Proportions: Solve the proportion for the given variable.

11. $\frac{5}{8} = \frac{x}{72}$

12. $\frac{3}{q} = \frac{39}{91}$

13. $\frac{m-5}{-3} = \frac{2m}{-8}$

14. $\frac{5t-3}{-2} = \frac{t+3}{2}$

(15-18) Percentages: Solve the following.

15. What number is 74% of 198?

16. 27 is what percent of 60?

17. 246 is 16% of what number?

18. What number is 13% of 16?

(19-22) Literal Equations. Solve for y in terms of x .

19. $3x - 6y = 18$

20. $-3 = -2x + y$

21. $-8x + 2y = 11$

22. Solve for m : $F = ma$

(23-26) Applications/Word Problems Review!!

23. The cookie monster goes to the store to buy some chocolate chip cookies. He buys 4 cookies for \$10.00. How many cookies can he buy for \$56.00.



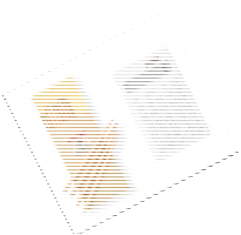
24. The Apple store is having a gigantic sale!!! An Apple Watch costs \$249.99 and is 45% off today only!

a. How much did you SAVE on the Apple Watch?

b. How much did you PAY for the Apple Watch?



25. Stella went to the office supplies store and bought a calculator for \$80.00 and 9 pencils. She spent a total of \$84.50 at the store, not including tax. How much did each pencil cost?



Self-Reflect:

On a scale of 1 - 5, (1 = Yikes! I need to study more!.. 5 = I am going to ACE this test!) how do you feel about unit 1?

1

2

3

4

5

Why?! Explain ☺