

Unit 1 Quiz Review

Name: _____ Date: _____

Do the following one-step and multi-step unit conversions. Round to 3 decimal places.

1. Fifty mph is how many feet per second?

- There are 5280 feet in one mile
- There are 0.034 ounces in one milliliter
- There are 0.454 kg in one pound
- There are 1.6 kilometers in one mile
- There are 73 gallons in 2 barrels
- There are 1.05 quarts in one liter
- There are 4 quarts in one gallon

2. Convert 15 dm to meters

3. Convert 7 quarts to liters.

4. One energy bar has a mass of 85 grams. What is the mass of 12 energy bars? Is that more or less than 1 kg?

5. How long does a car traveling at 75 mph take to travel 100 miles, in hours (Hint: $d=rt$)?

6. Sadie doing the Ice Bucket Challenge and has 14 fl oz in her bucket. She adds 3 more cups of water to the bucket. How much fluid will Sadie have in her bucket to pour on her head?

7. A triangle has a base of 9 ft and a height of 36 inches. What is the area of the triangle in yards? (Use $A=(1/2)bh$)

Solve for the given variable.

8. Solve for y . $3x - 6y = 12$

9. Solve for m . $\frac{4m+8}{6} = n$

10. Solve for x . $(x-10) = \frac{1}{2}(y-8)$

Solve the equation or inequality (graph the inequality)

11. $8p - 3(p - 6) \leq -7$

12. $5x - 10 = 7x + 12$

13. $\frac{-2}{3}x = 16$

14. How many terms are in the expression $5x^2 - 5x + 6$?

15. What are the terms, coefficients, variables, and constants, factors in the expression $5xy^2 - 5x + 6$?

16. Sabrina wants to have an average of at least 90 on her quizzes. If she took three quizzes and earned a 95, 86 and 82, what is the lowest grade she has to earn on the fourth quiz?

17. Write an algebraic expression for the following statements

- a. the cube of number increased by 12
- b. 8 times the difference of a number and 1
- c. the quotient of 5 and twice a number

18. Write a verbal expression for the following algebraic expression:

- a. $3x - 7$
- b. $7 + x^4$
- c. $\frac{x+9}{4}$

19. Destiny is trying to find the sum of 3 consecutive even integers. Their sum is 66. Find the 3 numbers.

20. The length of a rectangle is 5 inches more than the width. The perimeter is 126. Find the length and width of the rectangle.

21. On an algebra test, the highest grade was 36 points higher than the lowest grade. The sum of the two grades was 154. Find the lowest grade.

22. Bob and Sue are going to Willy Wonka World during the 3 day weekend. It costs \$15 to enter the park and take the tour. If every piece of candy that they eat along the way costs them \$0.25, what is an equation that represents how much money Sue will spend?

23. Write an inequality that represents 3 more than a number is at least 7.

24. Write an inequality that represents 5 less than a number is at most 4.
