

SHOW ALL WORK on your work papers! Write your answers on the lines provided.

1. Write the rate as a fraction in simplest form.
42 yards in 14 seconds 1) _____

2. Determine whether the proportion is a true proportion.
 $\frac{3}{8} = \frac{9}{21}$ 2. _____

3. Find the value of n.
 $\frac{2}{9} = \frac{3}{n}$ 3) _____

4. The ratio of a basketball player's completed free throws to attempted free throws is 4 to 7. If she completed 8 free throws, find how many free throws she attempted. Round to the nearest whole number if necessary. 4) _____

5. Express the fraction as a percent number: $\frac{7}{8}$ 5) _____

6. Write the equivalent decimal _____ 6) _____
and fraction _____ for 14%.

7. Translate to a proportion. Do NOT solve.
92 is 68% of what number? 7) _____

8. 3 is what percent of 24? 8) _____

9. _____ is 81% of 106. 9) _____

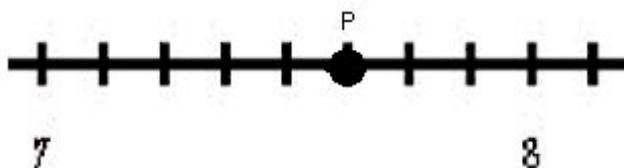
10. Find the simple interest when:
Principal = \$410, Rate = 6%, Time = 4 years. 10) _____

11. A telephone costs \$309 and is subject to a 5% sales tax. 11) _____
What is the amount of the sales tax? _____
What is the total purchase price of the telephone? _____

12. Bicycles are often on sale in one store during September. The regular price of one bicycle is \$227.95. With a "30% off" sale in the bicycle department, what is the sale price of the bicycle? Round the answer to the nearest cent. 12) _____

13. By switching service providers, a family's telephone bill changed from about \$50 a month to about \$46 a month. What was the percent decrease in the bill? 13) _____

14. Read the measurement at point P.



14) _____

15. 9.5 miles = _____ feet

15) _____

16. 82 ounces = _____ pounds

16) _____

17. 7200 ml = _____ liters

17) _____

18. Arrange in order of size (smallest to largest): km, m, mm, cm

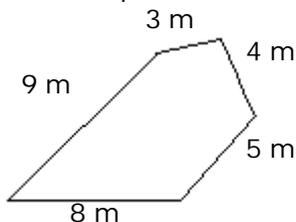
18) _____

19. Lew is running a fever of 99.5° F. Find this temperature as it would be shown on a Celsius thermometer.

19) _____

20. Find the perimeter.

20) _____

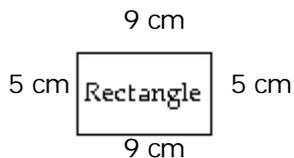


21. A circular fountain has a diameter of 20 ft. Approximate the distance around the fountain. Use 3.14 for π .

21) _____

22. Find the area of the figure.

22) _____

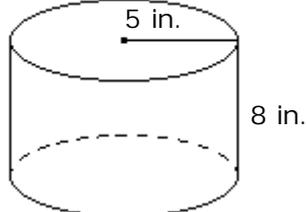


23. Find the volume of a box 5 in. x 8 in. x 2 in.

23) _____

24. Find the volume.

24) _____



Use 3.14 as the approximate value for π .

25. $-(-7) + |-3| =$

25) _____

26. $(-7) - (-3) =$ 26) _____

27. $|-7 + (-7)| + |-7 + 3| =$ 27) _____

28. $(-7) \cdot (-3)^2 =$ 28) _____

29. $\frac{(-7) \cdot 0}{-3} =$ 29) _____

30. Evaluate the expression for the given value.
 $\frac{6x-4}{5x}; x = -8$ 30) _____

31. Evaluate the expression for the given value.
 $x^2+x^3; x = -4$ 31) _____

32. Is $p = -13$ a solution of $13 - 8p = -7p$? 32) _____

33. Solve the equation: $-8a = 72$ 33) _____

34. Solve the equation: $\frac{b}{5} + 7 = -6$ 34) _____

35. Translate the phrase into a mathematical expression. Let N represent the number. 35) _____

Seven times the total of a number and eight

36. Five less than three times a number is 16. Find the number. 36) _____

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Conversions:

5280 feet = 1 mile

16 ounces = 1 pound

$F = \frac{9}{5}C + 32$

$C = \frac{5}{9}(F - 32)$