

Unit 3 Quiz Review

Date _____ Period _____

Convert the following.

1) 56.75 gallons to pints

2) 14.64 pints to gallons

3) 4.85 gallons to quarts

4) 2.88 pints to quarts

Convert between metric units.

5) 944,400 centimeters to meters

6) 4.56 kilometers to centimeters

7) 123.27 liters to mL

8) 23.76 g to mg

9) 23.76 g to kg

10) 37.98 mL to cL

Convert between standard units.

11) 80.75 inches to feet

12) 2.86 miles to feet

13) 8.29 inches to yards

14) 62.53 miles to yards

15) 6.84 feet to inches

Are the following proportional? Explain why or why not.

16) $\frac{12}{32}$ and $\frac{8}{3}$

17) $\frac{12}{28}$ and $\frac{27}{63}$

18) $\frac{5}{8}$ and $\frac{20}{32}$

Solve each proportion.

19) $\frac{3}{8} = \frac{s-2}{24}$

20) $\frac{x}{4} = \frac{3}{2}$

21) $\frac{4}{n+9} = \frac{2}{7}$

22) $\frac{3}{16y} = \frac{1}{y+13}$

23) $\frac{m}{3} = \frac{m+4}{7}$

Solve for the indicated value.

24) What percent of 12 is 8?

25) 3.2 is what percent of 80?

26) Find 150% of 82.

27) 8.2% of 300 is what?

28) What is 55% of 900?

29) What is 80% of 18.4?

Set up the proportion and solve based on the situation.

30) A student earned a grade of 80% on a math test with 20 problems. How many problems on this test did the student answer correctly?

31) There are 36 manual laborers in a crew. On Thursday, 29 were present. What percent of the crew showed up for work?

32) A student answered 86 problems on a test correctly and received a grade of 98%. How many problems were on the test?

33) There are 32 students in a class. Nine are female. What percent are male?

34) The Braves played 75 games and won 55 of them. What percent of games did they lose?

Solve each equation.

35) $y = mx + b$, for m

36) $w = 3x + 7y$, for y

37) $d = rt$, for t

38) $d = rt$, for t

39) $I = prt$, for t

40) $V = lwh$, for h

41) $A = \pi r^2$, for π

42) The ratio of oil to vinegar in a certain salad dressing is 8:5. How much oil must be blended with 7 liters of vinegar for that recipe?