

Name: _____

Date: _____

Measurement Review

1. Write two unit ratios that relate the given pair of measures. tablespoons and teaspoons

$$\frac{\underline{\hspace{2cm}}}{\underline{\hspace{2cm}}} \frac{T}{t}; \frac{\underline{\hspace{2cm}}}{\underline{\hspace{2cm}}} \frac{t}{T} \text{ (Simplify your answers.)}$$

2. Write two unit ratios that relate the given pair of measures.

miles and feet

$$\frac{\underline{\hspace{2cm}}}{\underline{\hspace{2cm}}} \frac{\text{mi}}{\text{ft}}; \frac{\underline{\hspace{2cm}}}{\underline{\hspace{2cm}}} \frac{\text{ft}}{\text{mi}} \text{ (Simplify your answers.)}$$

3. Use unit ratios to convert the units.

$$10 \text{ ft} = \underline{\hspace{2cm}} \text{ in (Round to the nearest hundredth as needed.)}$$

4. How many quarts are in 11 gal?

$$\text{There are } \underline{\hspace{2cm}} \text{ quarts in 11 gal. (Round to the nearest hundredth as needed.)}$$

5. Develop two conversion factors for the pair of units.

quarts and gallons

$$\text{quarts to gallons} = \underline{\hspace{2cm}}$$

(Type a whole number or decimal rounded to four decimal places as needed.)

$$\text{gallons to quarts} = \underline{\hspace{2cm}}$$

(Type a whole number or decimal rounded to four decimal places as needed.)

6. Use conversion factors to convert units of measure.

How many pounds are in 688 oz?

7. Use conversion factors to convert units of measure.

How many feet are in 2.2 mi?

There are feet in 2.2 miles. (Type a whole number or a decimal.)

8. Express the measure in standard notation.

7 ft 23 in

The measure in standard notation is _____ ft _____ in.

9. Express the measure in standard notation.

5 gal 5 qt 48 oz

The measure in standard notation is _____ gal _____ qt _____ oz.

10. Add and write the answer in standard notation.

$$\begin{array}{r} 6 \text{ lb } 3 \text{ oz} \\ + 3 \text{ lb } 7 \text{ oz} \\ \hline \end{array}$$

The sum in standard notation is _____ lb _____ oz.

11. Perform the operation.

$$5 \text{ gal } 3 \text{ qt} + 8 \text{ gal } 3 \text{ qt}$$

$$5 \text{ gal } 3 \text{ qt} + 8 \text{ gal } 3 \text{ qt} = \text{_____ gal } \text{_____ qt}$$

12. Add and write the answer in standard notation.

$$\begin{array}{r} 2 \text{ yd } 5 \text{ ft} \\ + 1 \text{ yd } 5 \text{ ft} \\ \hline \end{array}$$

The sum in standard notation is _____ yd _____ ft.

13. Subtract and write the answer in standard form.

$$3 \text{ ft} - 27 \text{ in}$$

$$3 \text{ ft} - 27 \text{ in} = \text{_____ in}$$

14. Subtract and write the answer in standard notation.

$$\begin{array}{r} 11 \text{ lb } 12 \text{ oz} \\ - 8 \text{ lb } 10 \text{ oz} \\ \hline \end{array}$$

$$\begin{array}{r} \text{ lb} \text{ oz} \\ - \text{ lb} \text{ oz} \\ \hline \text{_____ lb } \text{_____ oz} \end{array}$$

(Simplify your answers.)

15. Subtract and write the answer in standard form.

$$\begin{array}{r} 2 \text{ ft } 31 \text{ in} \\ - 1 \text{ ft } 32 \text{ in} \\ \hline \end{array}$$

The difference is _____ ft _____ in.

16. Multiply.

$$\begin{array}{r} 23\text{mi} \\ \times 4 \\ \hline \end{array}$$

The product is _____ mi.

17. Multiply and write the answer in standard notation.

$$\begin{array}{r} 8 \text{ lb } 7\text{oz} \\ \times \quad 3 \\ \hline \end{array}$$

The product in standard notation is _____ lb _____ oz.

18. Multiply.

$$2 \text{ in} \times 5 \text{ in}$$

$$2 \text{ in} \times 5 \text{ in} = \underline{\hspace{2cm}} \text{ in}^2$$

19. Multiply.

$$\begin{array}{r} 12 \text{ yd} \times 16 \text{ yd} \\ 12 \text{ yd} \times 16 \text{ yd} = \underline{\hspace{2cm}} \text{ yd}^2 \end{array}$$

20. Divide.

$$\begin{array}{r} 8 \text{ days } 3 \text{ h} \div 3 \\ 8 \text{ days } 3 \text{ h} \div 3 = \underline{\hspace{2cm}} \text{ days } \underline{\hspace{2cm}} \text{ h} \end{array}$$

21. Divide.

$$\begin{array}{r} 4 \text{ yd } 1 \text{ ft } 6 \text{ in} \div 3 \\ 4 \text{ yd } 1 \text{ ft } 6 \text{ in} \div 3 = \underline{\hspace{2cm}} \text{ yd } \underline{\hspace{2cm}} \text{ ft } \underline{\hspace{2cm}} \text{ in} \end{array}$$

22. Change to the indicated rate of measure.

$$\frac{16 \text{ lb}}{\text{h}} = \underline{\hspace{1cm}} \frac{\text{lb}}{\text{min}}$$

$$\frac{16 \text{ lb}}{\text{h}} = \underline{\hspace{2cm}} \frac{\text{lb}}{\text{min}} \text{ (Type a whole number or a simplified fraction.)}$$

23. Doris Johnson has two open containers of sugar. If she combines 3 lb 9 oz from one container with 1 lb 15 oz from the other container, how much total sugar does she have?

Doris has _____ lb _____ oz of sugar.

24. A mechanic has a length of hose 8 ft long. What is the length after 9 in is cut off?

The length is _____ ft _____ in. (Type your answer in standard form.)

25. Rachel Hamilton was amazed when she grew a 39 lb 15 oz squash in her garden, but she later learned that her neighbor grew one that weighed 54 lb 14 oz. How far below this weight was Rachel's squash?

Rachel's squash weighed _____ lb _____ oz less than her neighbor's squash.

26. A room is to be covered with square linoleum tiles that are 1 ft by 1 ft. If the room is 11 ft by 24 ft, how many tiles (square feet) are needed?

_____ tiles (square feet) are needed.

27. A vat holding 10 gal 2 qt of defoliant is emptied equally into 3 tanks. How many gallons and quarts are in each tank?

There are _____ gallon(s) and _____ quart(s) in each tank.

28. A roll of electrical cable 100 ft long is divided into 20 equal sections. How long is each section?

The length of each section is _____ ft. (Simplify your answer.)

29. How many 5-in. pieces can be cut from 20 in. of pipe?

The number of 5-in. pieces that can be cut from 20 in. pipe is _____ .
(Simplify your answer.)

30. How many cans weighing 10 oz are in a case if the case weighs 16 lb 14 oz?

There are _____ cans in the case.