

Chapter 4 Practice Test

Find each product or quotient. Write your answer in simplest form. Show your work.

1. $\frac{5}{18} \times 10\frac{2}{3}$

$$\frac{5}{18} \times \frac{32}{3} = \frac{80}{27} \text{ or } 2\frac{26}{27}$$

2. $\frac{7}{16} \times \frac{4}{21} = \frac{7}{16} \times \frac{21}{4} = \frac{147}{64} \text{ or } 2\frac{19}{64}$

3. $3\frac{2}{7} \times 1\frac{2}{9}$

$$\frac{23}{7} \times \frac{11}{9} = \frac{253}{63} = 4\frac{1}{63}$$

4. $2\frac{4}{5} \times 4\frac{1}{3}$

$$\frac{14}{5} \times \frac{13}{3} = \frac{182}{15} = 12\frac{2}{15}$$

5. $\frac{12}{1} \times \frac{1}{9} = \frac{4}{3} = 1\frac{1}{3}$

6. $8 \div \frac{4}{7}$

$\frac{28}{1} \cdot \frac{7}{4} = 19$

7. $5\frac{1}{6} \div 6\frac{1}{5}$

$\frac{31}{6} \div \frac{31}{5} = \frac{31}{6} \cdot \frac{5}{31} = \frac{5}{6}$

8. $4 \div 2\frac{4}{5}$

$\frac{4}{1} \div \frac{14}{5}$

$\frac{4}{1} \cdot \frac{5}{14} = \frac{20}{14} = \frac{10}{7} = 1\frac{3}{7}$

9. $2\frac{1}{4} \div \frac{3}{4}$

$\frac{9}{4} \cdot \frac{4}{3} = 3$

10. $5\frac{1}{8} \div 2\frac{3}{4}$

$\frac{41}{8} \div \frac{11}{4}$

$\frac{41}{8} \cdot \frac{4}{11} = \frac{41}{22} = 1\frac{19}{22}$

11. Joelle's necklace is $12\frac{2}{5}$ inches long. Erin's necklace is $3\frac{1}{4}$ times as long. About how long is Erin's necklace?

$$12\frac{2}{5} \times 3\frac{1}{4}$$

$$\frac{62}{5} \times \frac{13}{4} = \frac{62}{5} \cdot \frac{13}{4} = \frac{248}{20} = 3\frac{53}{5}$$

12. Norah has $\frac{4}{5}$ ton of stone to spread equally in 3 square yards. How many tons of stone will be spread in each square yard?

$$\frac{4}{5} \div 3 = \frac{4}{5} \cdot \frac{1}{3} = \frac{4}{15}$$

13. Brandon has $7\frac{1}{3}$ gallons of paint. He plans on using $2\frac{3}{4}$ gallons on each room. How many rooms will he be able to paint?

$$7\frac{1}{3} \div 2\frac{3}{4}$$

$$\frac{22}{3} \div \frac{11}{4} = \frac{22}{3} \cdot \frac{4}{11} = \frac{8}{3} = 2\frac{2}{3} \text{ gallons per room}$$

14. Mia is making costumes for a play. Each costume needs $2\frac{5}{7}$ yards of velvet. She is making 7 costumes. About how much velvet does she need?

$$2\frac{5}{7} \times 7$$

$$\frac{19}{7} \times \frac{7}{1} = 19 \text{ yards}$$

15. The area of a closet floor measures 4 yards by 4 yards and each custom tile that makes up the flooring is $2\frac{1}{4}$ square feet. How many tiles are needed to cover the floor?

$$4 \times 4 = 16 \div 2\frac{1}{4}$$

$$\frac{16}{1} \div \frac{9}{4} = \frac{16}{1} \cdot \frac{4}{9} = \frac{64}{9} = 7\frac{1}{9}$$

about 8

16. Ms. Oliver sewed together a quilt that is $4\frac{3}{5}$ feet long and $3\frac{1}{2}$ feet wide. What is the area of her quilt?

$$4\frac{3}{5} \times 3\frac{1}{2}$$

$$\frac{23}{5} \times \frac{7}{2} = \frac{161}{10} = 16\frac{1}{10}$$

17. A box contains $2\frac{2}{3}$ pounds of pasta. How many ounces of pasta are in the box?

$$2\frac{2}{3} = \frac{8 \text{ pounds}}{3} \times \frac{16 \text{ ounces}}{1 \text{ pound}} = \frac{128}{3} = 42\frac{2}{3} \text{ ounces}$$

1 pound = 16 ounces

18. 54 oz = $3\frac{3}{8}$ lb

$$\frac{54 \text{ oz}}{1} \times \frac{1 \text{ lb}}{16 \text{ oz}} = \frac{54}{16} = \frac{27}{8} = 3\frac{3}{8} \text{ lbs}$$

19. $4\frac{2}{3}$ yd = 14 ft

$$\frac{14 \text{ yds}}{3} \times \frac{3 \text{ feet}}{1 \text{ yard}} = 14 \text{ yds}$$

1 yard = 3 feet

20. $4\frac{1}{4}$ qt = $8\frac{1}{2}$ pt

$$4\frac{1}{4} \text{ qt} = \frac{17 \text{ qt.}}{4} \times \frac{2 \text{ pt.}}{1 \text{ qt.}} = \frac{17}{2} = 8\frac{1}{2} \text{ pt.}$$

1 quart = 2 pints.

21. $3\frac{1}{5} T = \underline{6400}$ lb

$$\frac{16T}{5} \times \frac{400}{1T} = 6400 \text{ lb}$$

$1 T = 2000 \text{ lb}$

22. Rylie made 27 cups of punch for her party. How many fluid ounces of punch did she make?

$$\frac{27 \text{ cups}}{1} \times \frac{8 \text{ fl. oz.}}{1 \text{ cup}} = 216 \text{ fl. oz.}$$

$1 \text{ cup} = 8 \text{ fl. oz.}$

23. Addison made 7 quarts of punch for her party. How many gallons of punch did she make?

$$\frac{7 \text{ quarts}}{1} \times \frac{1 \text{ gallon}}{4 \text{ quarts}} = \frac{7}{4} = 1\frac{3}{4} \text{ gallons}$$

$1 \text{ gallon} = 4 \text{ quarts}$

24. A cooler contains $14\frac{1}{2}$ cups of juice. How many pints of juice does the cooler contain?

$$\frac{29 \text{ cups}}{2} \cdot \frac{1 \text{ pint}}{2 \text{ cups}}$$

$2 \text{ cups} = 1 \text{ pint}$

25. $5 \text{ m} = \underline{500}$ cm

$$\frac{5 \text{ m}}{1} \times \frac{100 \text{ cm}}{1 \text{ m}} = \frac{500 \text{ cm}}{1}$$

$1 \text{ m} = 100 \text{ cm}$