

Problem set – fractions - 3

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Solve each problem. Show all of your work. You may use a calculator, textbook, and notes. Express each answer as an exact fraction in lowest terms, or as a mixed number in lowest terms.

1. Multiply two thirds by one half.
2. What is the product of  $\frac{3}{16}$  and  $\frac{1}{2}$ ?
3. Find the product of  $\frac{2}{3}$  and  $\frac{1}{5}$ .
4. Divide  $\frac{2}{15}$  by  $\frac{1}{5}$ .
5. Divide three sevenths by two thirds.
6. Divide  $\frac{7}{8}$  by  $\frac{2}{3}$ .
7. A fifty-one gallon barrel of reagent is two thirds full. How many gallons are in the barrel?
8. Two thirds of a forty-eight gallon barrel of solvent is gone. How many gallons of solvent remain in the barrel?
9. After a batch of parts has been prepared, two fifths of a fifty gallon barrel of solvent remains in the barrel. How many gallons were used?

10. Out of a 500 gallon shipment, 350 gallons have been used. What fraction of the shipment remains?
11. Out of a 1,500 gallon shipment, 850 gallons remain. What fraction of the shipment has been used?
12. What fraction is  $\frac{1}{6} + \frac{1}{5}$ ?
13. Add  $\frac{3}{32}$  to  $\frac{5}{32}$ .
14. Add  $\frac{7}{16}$  to  $\frac{9}{32}$ .
15. Add  $\frac{3}{8}$  to  $2\frac{1}{3}$ .
16. What fraction is  $\frac{2}{3} - \frac{1}{4}$ ?
17. What fraction is  $\frac{9}{10} - \frac{3}{8}$ ?
18. What is the sum of  $\frac{2}{5}$ ,  $2\frac{3}{5}$ , and  $1\frac{7}{10}$ ?
19. Subtract  $\frac{3}{16}$  from  $\frac{21}{32}$ .
20. Subtract  $2\frac{5}{8}$  from  $7\frac{2}{8}$ .