

Problem set – fractions - 2

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

Solve each problem. Show all of your work. You may use a calculator, textbook, and notes.

For problems 1 through 10, put the correct sign, =, <, or > between each pair of fractions.

1.  $\frac{3}{8}$   $\frac{5}{8}$

6.  $\frac{1}{2}$   $\frac{3}{7}$

2.  $-\frac{2}{7}$   $-\frac{1}{7}$

7.  $-\frac{2}{3}$   $-\frac{3}{4}$

3.  $\frac{1}{8}$   $\frac{1}{10}$

8.  $\frac{5}{8}$   $\frac{9}{16}$

4.  $\frac{3}{8}$   $\frac{6}{16}$

9.  $-\frac{4}{9}$   $\frac{8}{13}$

5.  $-\frac{3}{8}$   $\frac{4}{9}$

10.  $\frac{1}{10}$   $\frac{2}{9}$

For problems 11, 12, and 13, write the numbers in order from least to greatest.

17.  $\frac{1}{2}$ ,  $\frac{1}{3}$ ,  $\frac{5}{16}$ ,  $\frac{1}{8}$

18.  $2\frac{5}{8}$ ,  $-\frac{8}{16}$ ,  $\frac{3}{32}$ ,  $\frac{1}{10}$

19.  $\frac{5}{8}$ ,  $\frac{7}{16}$ ,  $1\frac{5}{32}$ ,  $-\frac{4}{7}$

For the remaining problems, express each answer exactly as a fraction in lowest terms, a mixed number in lowest terms, or a whole number. There are twelve inches in one foot, three feet in one yard, and sixteen ounces in one pound.

20. What fraction of a dozen is 9 eggs?
21. If a one-foot threaded rod is cut into four equal parts, how long is each part?
22. How many inches is a quarter foot?
23. How many inches is one third of a foot?
24. How many ounces is half of a pound?
25. How many inches is one half of a foot plus one third of a foot?
26. How many ounces is one half of a pound plus one fourth of a pound?
27. In Acme's parts inventory, a type 700 igniter is  $1\frac{3}{4}$  feet long; a type 200 igniter is  $1\frac{1}{6}$  feet long. How much longer is a type 700?
28. If one box weighs 12 ounces, and another weighs  $1\frac{1}{8}$  pounds, by how many ounces do they differ in weight?