

LESSON 2 - PRACTICE PROBLEMS

1. List all the factors for each number.

a. 12

b. 23

c. 62

d. 81

e. 144

f. 28

g. 71

2. For each of the numbers in problem 1 above, indicate whether it is composite or prime and why. For each composite, write its prime factorization.

a. 12

b. 23

c. 62

d. 81

e. 144

f. 28

g. 71

3. Draw accurate diagrams that represent each of the fractions below.

a. $\frac{5}{8}$

b. $2\frac{1}{3}$

c. $\frac{6}{5}$

d. $1\frac{1}{5}$

e. $\frac{0}{2}$

4. For each problem below, write the fraction that best describes the situation. Be sure to reduce your final result.

a. John had 12 marbles in his collection. Three of the marbles were Comet marbles. What fraction of the marbles were Comet marbles? What fraction were NOT Comet marbles?

b. Jorge's family has visited 38 of the 50 states in America. What fraction of the states have they visited?

c. In a given bag of M & M's, 14 were yellow, 12 were green, and 20 were brown. What fraction were yellow? Green? Brown?

d. Donna is going to swim 28 laps. She has completed 8 laps. What fraction of laps has she completed? What fraction of her swim remains?

- e. Last night you ordered a pizza to eat while watching the football game. The pizza had 12 pieces of which you ate 6. Today, two of your friends come over to help you finish the pizza and watch another game. What is the fraction of the LEFTOVER pizza that each of you gets to eat (assuming equally divided). What is the fraction of the ORIGINAL pizza that each of you gets to eat (also assuming equally divided).
5. Write each mixed number as an improper fraction.

a. $3\frac{1}{4}$

b. $2\frac{1}{3}$

c. $6\frac{4}{5}$

d. $1\frac{1}{7}$

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

6. Write each improper fraction as a mixed number.

a. $\frac{16}{13}$

b. $\frac{17}{3}$

c. $\frac{42}{25}$

d. $\frac{73}{7}$

e. $\frac{21}{2}$

7. Which of the following CANNOT be written as a mixed number and why?

a. $\frac{8}{3}$

b. $\frac{15}{8}$

c. $\frac{21}{25}$

d. $\frac{34}{27}$

e. $\frac{11}{12}$

8. Write two equivalent fractions for each of the fractions below.

a. $\frac{3}{7}$

b. $\frac{4}{5}$

c. $\frac{2}{9}$

d. $\frac{5}{8}$

e. $\frac{11}{12}$

9. Write each fraction in simplest form.

a. $\frac{3}{6}$

b. $\frac{15}{5}$

c. $\frac{12}{36}$

d. $\frac{120}{164}$

e. $\frac{11}{11}$

f. $\frac{0}{21}$

10. Find the LCM of each of the pairs of numbers below.

a. 4 and 5

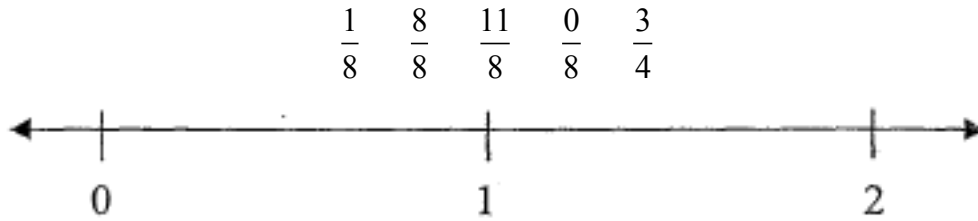
b. 6 and 12

c. 5 and 7

d. 3 and 8

e. 12 and 15

11. Using equally spaced tick marks, plot the following numbers on the number line.



12. For each pair of fractions, place $<$ or $>$ or $=$ between them to show the relationship between the two numbers.

a. $\frac{3}{7} \quad \frac{1}{3}$

b. $\frac{3}{5} \quad \frac{1}{2}$

c. $\frac{11}{13} \quad \frac{6}{7}$

d. $\frac{3}{4} \quad \frac{6}{8}$

e. $\frac{5}{9} \quad \frac{2}{3}$

13. Simplify each of the following fractions if possible.

a. $\frac{5}{1}$

b. $\frac{6}{6}$

c. $\frac{0}{4}$

d. $\frac{1}{6}$

e. $\frac{1}{1}$

f. $\frac{1}{0}$