

Name Jack

Date _____

1. Draw a tape diagram to represent

$$\frac{3}{4} + \frac{3}{4} + \frac{3}{4} + \frac{3}{4}$$



Write a multiplication expression equal to

$$\frac{3}{4} + \frac{3}{4} + \frac{3}{4} + \frac{3}{4}$$

$$4 \times \frac{3}{4}$$

2. Draw a tape diagram to represent $\frac{7}{12} + \frac{7}{12} + \frac{7}{12}$



Write a multiplication expression equal to

$$\frac{7}{12} + \frac{7}{12} + \frac{7}{12}$$

$$3 \times \frac{7}{12}$$

3. Rewrite each repeated addition problem as a multiplication problem and solve. Express the result as a mixed number. The first one has been started for you.

$$a. \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} = 4 \times \frac{1}{8} = \frac{4 \times 1}{8} = \frac{4}{8} = 5 \frac{3}{8}$$

$$b. \frac{3}{10} + \frac{3}{10} + \frac{3}{10} = 3 \times \frac{3}{10} = \frac{3 \times 3}{10} = \frac{9}{10} = 2 \frac{7}{10}$$

$$c. \frac{11}{12} + \frac{11}{12} + \frac{11}{12} + \frac{11}{12} + \frac{11}{12} = 5 \times \frac{11}{12} = \frac{55}{12} = 4 \frac{7}{12}$$

4. Solve using any method. Express your answers as whole or mixed numbers.

a. $8 \times \frac{2}{3} = ?$

$$8 \times \frac{2}{3} = \frac{16}{3} = 5\frac{1}{3}$$

b. $12 \times \frac{3}{4} = \frac{12 \times 3}{4} = \frac{36}{4} = 9$

c. $50 \times \frac{4}{5} = \frac{50 \times 4}{5} = \frac{200}{5} = 40$

d. $26 \times \frac{7}{8} = \frac{26 \times 7}{8} = \frac{182}{8} = 22\frac{6}{8}$

$$\begin{array}{r} 26 \\ \times 7 \\ \hline 182 \end{array} \qquad \begin{array}{r} 22 \overline{) 182} \\ \underline{44} \\ 182 \\ \underline{166} \\ 16 \end{array}$$

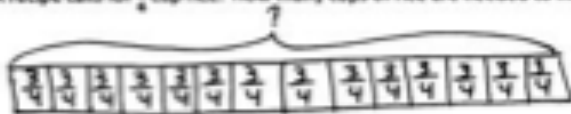
5. Morgan poured $\frac{9}{10}$ liter of punch into each of 6 bottles. How many liters of punch did she pour in all?



$$6 \times \frac{9}{10} = \frac{6 \times 9}{10} = \frac{54}{10} = 5\frac{4}{10}$$

Morgan poured $5\frac{4}{10}$ liters of punch in all.

6. A recipe calls for $\frac{3}{4}$ cup rice. How many cups of rice are needed to make the recipe 14 times?



$$14 \times \frac{3}{4} = \frac{14 \times 3}{4} = \frac{42}{4} = 10\frac{2}{4}$$

$10\frac{2}{4}$ cups of rice are needed.

7. A butcher prepared 120 sausages using $\frac{3}{8}$ pound of meat for each. How many pounds did he use in all?

$$120 \times \frac{3}{8} = \frac{120 \times 3}{8} = \frac{360}{8} = 45$$

$$\begin{array}{r} 45 \\ 8 \overline{) 360} \\ \underline{-32} \\ 40 \\ \underline{-40} \\ 0 \end{array}$$

The butcher used 45 pounds of meat in all.