

Name _____

Date _____

1. Rewrite the following expressions as shown in the example.

Example: $\frac{2}{3} + \frac{2}{3} + \frac{2}{3} + \frac{2}{3} = \frac{4 \times 2}{3} = \frac{8}{3}$

a. $\frac{5}{3} + \frac{5}{3} + \frac{5}{3}$
 $= \frac{3 \times 5}{3} = \frac{15}{3} = 5$

b. $\frac{13}{5} + \frac{13}{5}$
 $= \frac{2 \times 13}{5} = \frac{26}{5}$

c. $\frac{9}{4} + \frac{9}{4} + \frac{9}{4}$
 $= \frac{3 \times 9}{4} = \frac{27}{4}$

2. Solve each problem in two different ways as modeled in the example.

Example: $\frac{2}{3} \times 6 = \frac{2 \times 6}{3} = \frac{12}{3} = 4$

b. $\frac{2}{3} \times 6 = \frac{2 \times 6^2}{3_1} = 4$

a. $\frac{3}{4} \times 16 = \frac{3 \times 16}{4} = \frac{48}{4} = 12$

$\frac{3}{4} \times 16 = \frac{3 \times 16^4}{4_1} = \frac{12}{1} = 12$

b. $\frac{4}{3} \times 12 = \frac{4 \times 12}{3} = \frac{48}{3} = 16$

$\frac{4}{3} \times 12 = \frac{4 \times 12^4}{3_1} = \frac{16}{1} = 16$

c. $40 \times \frac{11}{10} = \frac{40 \times 11}{10} = \frac{440}{10} = 44$

$40 \times \frac{11}{10} = \frac{40 \times 11^4}{10_1} = \frac{44}{1} = 44$

d. $\frac{7}{6} \times 36 = \frac{7 \times 36}{6} = \frac{252}{6} = 42$

$\frac{7}{6} \times 36 = \frac{7 \times 36^6}{6_1} = \frac{42}{1} = 42$

e. $24 \times \frac{5}{8} = \frac{24 \times 5}{8} = \frac{120}{8} = 15$

$24 \times \frac{5}{8} = \frac{24 \times 5^3}{8_1} = \frac{15}{1} = 15$

$$f. \quad 18 \times \frac{5}{12} = \frac{18 \times 5}{12} = \frac{90}{12} = 7\frac{6}{12} = 7\frac{1}{2} \quad 18 \times \frac{5}{12} = \frac{\overset{3}{\cancel{18}} \times 5}{\underset{2}{\cancel{12}}} = \frac{15}{2} = 7\frac{1}{2}$$

$$g. \quad \frac{10}{9} \times 21 = \frac{10 \times 21}{9} = \frac{210}{9} = 23\frac{3}{9} = 23\frac{1}{3}$$

$$\frac{10}{9} \times 21 = \frac{10 \times \overset{7}{\cancel{21}}}{\underset{3}{\cancel{9}}} = \frac{70}{3} = 23\frac{1}{3}$$

3. Solve each problem any way you choose.

$$a. \quad \frac{1}{3} \times 60 = \frac{1 \times 60}{3} = \frac{60}{3} = 20 \quad \frac{1}{3} \text{ minute} = \underline{20} \text{ seconds}$$

$$b. \quad \frac{4}{5} \times 60 = \frac{4 \times \overset{12}{\cancel{60}}}{\underset{5}{\cancel{5}}} = \frac{48}{1} = 48 \quad \frac{4}{5} \text{ hour} = \underline{48} \text{ minutes}$$

$$c. \quad \frac{7}{10} \times 1000 = \frac{7 \times \overset{100}{\cancel{1000}}}{\underset{1}{\cancel{10}}} = \frac{700}{1} = 700 \quad \frac{7}{10} \text{ kilogram} = \underline{700} \text{ grams}$$

$$d. \quad \frac{3}{5} \times 100 = \frac{3 \times \overset{20}{\cancel{100}}}{\underset{5}{\cancel{5}}} = \frac{60}{1} = 60 \quad \frac{3}{5} \text{ meter} = \underline{60} \text{ centimeters}$$