

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

**Practice Booklet: Changing Fractions to Decimals**

1. Change each fraction to a decimal.

a)  $\frac{7}{10} = 0.7$

b)  $\frac{21}{100} = 0.21$

c)  $\frac{631}{1000} = 0.631$

d)  $\frac{7}{100} = 0.07$

e)  $\frac{57}{10} = 5.7$

f)  $\frac{2}{1000} = 0.002$

g)  $\frac{99}{10} = 9.9$

h)  $\frac{513}{100} = 5.13$

i)  $\frac{77}{1000} = 0.077$

2. Change each fraction to a decimal.

a)  $\frac{3 \times 2}{5 \times 2} = \frac{6}{10} = 0.6$

b)  $\frac{2 \times 4}{25 \times 4} = \frac{8}{100} = 0.025$

c)  $\frac{4 \div 4}{40 \div 4} = \frac{1}{10} = 0.1$

d)  $\frac{7 \times 5}{20 \times 5} = \frac{35}{100} = 0.35$

e)  $\frac{3 \times 8}{125 \times 8} = \frac{24}{1000} = 0.024$

f)  $5\frac{1}{2} = 5.5$

g)  $\frac{3}{4} = 0.75$

h)  $1\frac{9 \times 2}{50 \times 2} = 1.18$

i)  $\frac{7 \times 5}{20 \times 5} = 0.35$

3. Give 4 examples of repeating decimals.

Ex:  $0.\bar{5}$ ,  $0.\overline{123}$ ,  $1.5\bar{7}$

4. Give 4 examples of terminating decimals.

Ex.  $0.6$ ,  $0.125$ ,  $1.7531$

5. Change each fraction to a decimal. Use your calculator.

$$a) \frac{5}{8} = 0.625$$

$$b) \frac{2}{7} = 0.\overline{285714}$$

$$c) \frac{1}{6} = 0.1\overline{6}$$

$$d) \frac{2}{13} = 0.\overline{153846}$$

$$e) \frac{3}{8} = 0.375$$

$$f) \frac{3}{7} = 0.\overline{428571}$$

6. Change each improper fraction to a mixed number:

$$a) \frac{7}{5} = 1\frac{2}{5}$$

$$b) \frac{22}{8} = 2\frac{6}{8} = 2\frac{3}{4}$$

$$c) \frac{9}{7} = 1\frac{2}{7}$$

$$d) \frac{4}{3} = 1\frac{1}{3}$$

$$e) \frac{25}{12} = 2\frac{1}{12}$$

$$f) \frac{60}{25} = 2\frac{10}{25} \\ = 2\frac{2}{5}$$

7. Change each mixed number to an improper fraction:

$$a) 1\frac{2}{5} = \frac{7}{5}$$

$$b) 3\frac{1}{8} = \frac{25}{8}$$

$$c) 4\frac{1}{2} = \frac{9}{2}$$

$$d) 1\frac{1}{3} = \frac{4}{3}$$

$$e) 1\frac{1}{12} = \frac{13}{12}$$

$$f) 2\frac{2}{3} = \frac{8}{3}$$

8. Change the following fractions to decimals. Use any method.

$$a) \frac{1}{5} = 0.2$$

$$b) \frac{23}{100} = 0.23$$

$$c) \frac{2}{9} = 0.\overline{2}$$

$$d) \frac{2}{3} = 0.\overline{6}$$

$$e) \frac{11}{1000} = 0.011$$

$$f) \frac{3}{25} = \frac{12}{100} = \frac{6}{50} = \frac{3}{25} = 0.12$$

$$g) \frac{1}{5} = 1.2$$

$$h) \frac{3}{2} = 1.5$$

$$i) \frac{3}{8} = 0.375$$

$$j) \frac{3}{50} = 0.06$$

$$k) \frac{1}{5} = 0.2$$

$$l) \frac{2}{33} = 0.\overline{06}$$

$$m) \frac{1}{999} = 0.\overline{001}$$

$$n) 3\frac{1}{10} = 3.1$$

$$o) \frac{7}{3} = 2\frac{1}{3} = 2.\overline{3}$$

9. Reduce each fraction:

$$a) \frac{5 \div 5}{10 \div 5} = \frac{1}{2}$$

$$b) \frac{2 \div 2}{4 \div 2} = \frac{1}{2}$$

$$c) \frac{3 \div 3}{9 \div 3} = \frac{1}{3}$$

$$d) \frac{25 \div 5}{100 \div 5} = \frac{5}{20} = \frac{1}{4}$$

$$e) \frac{8 \div 2}{10 \div 2} = \frac{4}{5}$$

$$f) \frac{10 \div 5}{25 \div 5} = \frac{2}{5}$$

$$g) \frac{5 \div 5}{25 \div 5} = \frac{1}{5}$$

$$h) \frac{18 \div 3}{27 \div 3} = \frac{6 \div 3}{9 \div 3} = \frac{2}{3}$$

$$i) \frac{80 \div 20}{100 \div 20} = \frac{4}{5}$$

10. Change each decimal to a fraction. Be sure to reduce each fraction:

$$\text{a) } 0.23 = \frac{23}{100}$$

$$\text{b) } 0.8 = \frac{8}{10} = \frac{4}{5}$$

$$\text{c) } 0.25 = \frac{1}{4}$$

$$\text{d) } 0.55 = \frac{55}{100} = \frac{11}{20}$$

$$\text{e) } 0.125 = \frac{125}{1000} = \frac{1}{8}$$

$$\text{f) } 1.25 = 1\frac{1}{4}$$

$$\text{g) } 0.\bar{3} = \frac{1}{3}$$

$$\text{h) } 2.05 = 2\frac{5}{100} = 2\frac{1}{20}$$

$$\text{i) } 0.04 = \frac{4}{100} = \frac{2}{50} = \frac{1}{25}$$

11/. Complete each equivalent fraction:

$$\text{a) } \frac{5}{10} = \frac{1}{\boxed{2}} \quad \begin{array}{l} \div 5 \\ \div 5 \end{array}$$

$$\text{b) } \frac{\boxed{9}}{12} = \frac{3}{4} \quad \begin{array}{l} \times 3 \\ \times 3 \end{array}$$

$$\text{c) } \frac{\boxed{9}}{9} = \frac{9}{27} \quad \begin{array}{l} \div 3 \\ \div 3 \end{array}$$

$$\text{d) } \frac{\boxed{7}}{8} = \frac{35}{40} \quad \begin{array}{l} \div 5 \\ \div 5 \end{array}$$

$$\text{e) } \frac{10}{12} = \frac{5}{\boxed{6}}$$

$$\text{f) } \frac{5}{6} = \frac{10}{\boxed{12}}$$