Name: _SAMPLE_   Date: _____

7th Grade RED CHAPTER 2 Practice 2

Write the rational number as a decimal. (2pt each)

1) $-\frac{7}{8}$

$$\begin{array}{r} 0.875 \\ 8\overline{)7.000} \\ -64 \\ \hline 60 \\ -56 \downarrow \\ \hline 40 \end{array}$$

1) -0.875

2) $4\frac{5}{9}$

$$\begin{array}{r} 0.55 \\ 9\overline{)50.0} \\ -45 \downarrow \\ \hline 50 \end{array}$$

2) $4.\overline{5}$

Write the decimal as a fraction or mixed number in simplest form.

3) 7.625

$$\frac{625}{1000}$$

$$25\overline{)625} \quad 1000$$
$$5\overline{)25} \quad 40$$
$$5 \quad 8$$

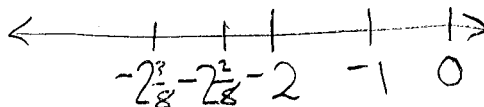3) $7\frac{5}{8}$

4) −0.7

$$\frac{7}{10}$$

4) $-\frac{7}{10}$

Complete the statement using <, >, or =. (1pt each)

5) $-2\frac{3}{8}$ ■ $-2\frac{1 \times 2}{4 \times 2}$

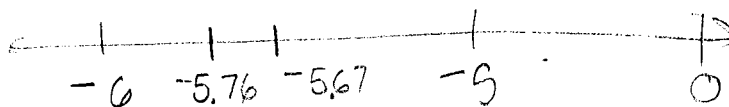$2\frac{3}{8}$ $-2\frac{2}{8}$

5) $-2\frac{3}{8} < -2\frac{1}{4}$

6) -5.67 ■ -5.76

6) $-5.67 > -5.76$

7) You spend $1\frac{2}{5}$ hours hiking and an additional $\frac{9}{10}$ hour to rest. How much time did you spend in total?

7) $2\frac{3}{10}$ hr

$$1\frac{2 \times ?}{5 \times 2} + \frac{9}{10}$$

$$1\frac{4}{10}$$

$$+ \frac{9}{10} \qquad \frac{13}{10} \, \text{or} \, 1\frac{3}{10}$$

Add or subtract. Write fractions in simplest form.

8) $-7\frac{3}{4} + -2\frac{1}{3}$

8) $-10\frac{1}{12}$

$$7\frac{3}{4} \qquad \frac{9}{12} \qquad 7$$

$$+ 2\frac{1}{3} \times 4 \qquad + \frac{4}{12} \qquad + 2$$

$$\frac{13}{12} \, \text{or} \, 1\frac{1}{12} \qquad 10\frac{1}{12}$$

9) $-6\frac{1}{4} - -4\frac{9}{10} \longrightarrow -6\frac{1}{4} + 4\frac{9}{10}$

9) $-1\frac{7}{20}$

$$6\frac{1 \times 5}{4 \times 5} \qquad 5\frac{6\frac{5}{20} + \frac{20}{20}}{} = 5\frac{25}{20}$$

$$- 4\frac{9 \times 2}{10 \times 2} \qquad - 4\frac{18}{20} \qquad -4\frac{18}{20}$$

$$-1\frac{7}{20}$$

10) $15.36 + -12.095$

10) 3.265

$$15.360$$
$$- 12.095$$
$$\overline{3.265}$$

11) $-5.9 - -4.46 \longrightarrow -5.9 + 4.46$

11) -1.44

$$5.90$$
$$- 4.46$$
$$\overline{1.44}$$

Find the distance between the two numbers on the number line.

12)

12) $9\frac{1}{10}$

$$\longleftarrow \quad \text{---} \quad \text{---} \quad \text{---} \quad \longrightarrow$$
$$-6\frac{3}{5} \qquad 0 \qquad 2\frac{1}{2}$$

$$6\frac{9}{10}$$
$$+ 2\frac{1}{5}$$
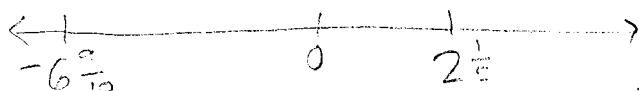
$$\frac{11}{10} \, \text{or} \, 1\frac{1}{10} \qquad 6$$
$$+ 2$$
$$\overline{9\frac{1}{10}}$$

Find the distance between the two numbers on the number line.

13)

-4.02   -2.15   0

$$3\overset{9}{\underset{}{4}}.\overset{12}{0}\overset{}{8}$$
$$-\ 2.15$$
$$\overline{\ \ 1.87}$$
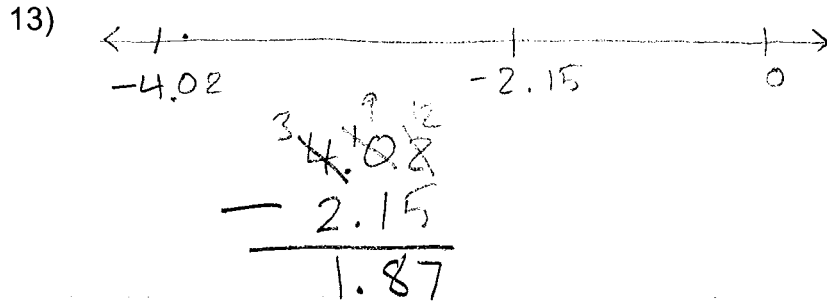
13) __1.87__

14) The table shows the changes in rainfall (in inches) from the monthly average of four months. What is the mean change?

14) __-0.45 in.__

Month	May	June	July	Aug.
Change (in.)	−0.58	−0.67	2.12	−2.67

$$-0.58 + {}^-0.67$$
$$0.58$$
$$+0.67$$
$$\overline{-1.25}$$

$$-1.25 + 2.12$$
$$\overset{1\ 10}{\cancel{2}.\cancel{1}2}$$
$$-1.25$$
$$\overline{\ 0.87}$$

$$0.87 + {}^-2.67$$
$$\cancel{2}.67$$
$$-0.87$$
$$\overline{-1.80}$$

$$\begin{array}{r} 0.45 \\ 4\overline{)-1.80} \\ -16\downarrow \\ \hline 20 \\ -20 \\ \end{array}$$

15) You buy a bag of Halloween candy for $11.59 and a pumpkin for $3.75. How much more did the candy cost than the pumpkin?

15) $__7.84__

$$1\overset{0}{1}.\overset{15}{5}9$$
$$-\ 3.75$$
$$\overline{\ \ 7.84}$$

Evaluate. Write fractions in simplest form.

16) $3\frac{1}{5} - -\frac{7}{2} + -1$

16) __$5\frac{7}{10}$__

$$6\frac{7}{10} + -1$$

$$3\frac{1}{5} + \frac{7}{2} \text{ or } 3\frac{1}{2}$$

$$3\frac{1\times 2}{5\times 2} \quad 3\frac{2}{10}$$
$$+3\frac{5}{10}$$

$$5\frac{7}{10}$$

17) $1.7 - |3.5| - -9.3$

17) __7.5__

$$1.7 - 3.5$$
$$1.7 + -3.5$$
$$\overset{2\ 1}{\cancel{3}.5}$$
$$-1.7$$
$$\overline{\ 1.8}$$

$$-1.8 + 9.3$$
$$\overset{8}{\cancel{9}}.\overset{13}{\cancel{3}}$$
$$-1.8$$
$$\overline{\ 7.5}$$

18) $7.452 \div -0.12$

18) __-62.1__

$$\begin{array}{r} 62.1 \\ 12\overline{)7.45.2} \\ -72\downarrow \\ \hline 25 \\ 24 \\ \hline 12 \end{array}$$

Evaluate. Write fractions in simplest form.

19) $-4\frac{1}{7} \times 5\frac{1}{4}$

$$\frac{29}{7} \times \frac{21}{4}^{3} = \frac{87}{4}$$

$$\begin{array}{r} 3\frac{3}{4} \\ 4\overline{)87} \\ -8 \\ \hline 07 \\ -14 \\ \hline 3 \end{array}$$

19) $-21\frac{3}{4}$

20) $(-\frac{4}{5})^2 - \frac{1}{3}(3\frac{1}{2})$

$$\frac{-4}{5} \times \frac{-4}{5} = \frac{16 \times 6}{25 \times 6} - 1\frac{1 \times 25}{6 \times 25}$$

$$\frac{96}{150} - 1\frac{25}{150} \rightarrow \frac{96}{150} \div -1\frac{25}{150}$$

$\frac{1}{3} \times \frac{7}{2} = \frac{7}{6} = 1\frac{1}{6}$

$0 \times \frac{25}{150} + \frac{150}{150}$

$-\frac{96}{150}$

20) $-\frac{79}{150}$

$\frac{175}{150}$

$-\frac{96}{150} = \frac{79}{150}$

21) $0.3 \times (-10.5) - 6.86$

$$\begin{array}{r} 10.5 \\ \times\ \ .3 \\ \hline 3.15 \end{array}$$

$3.15 - 6.86$

$3.15 + -6.86$

$$\begin{array}{r} 6.86 \\ -3.15 \\ \hline -3.71 \end{array}$$

21) -3.71

22) A recipe calls for $5\frac{1}{2}$ cups of sugar. You have $5\frac{5}{8}$ cups of sugar. Do you have enough sugar? Explain how you found your answer

$5\frac{1}{2}$ or $5\frac{4}{8} < 5\frac{5}{8}$

Answer: NO

23) A 12.8 gallon aquarium is $\frac{3}{4}$ full. How many more gallons of water does it take to fill the aquarium?

$\frac{3}{4}$ full so need $\frac{1}{4}$

$12\frac{8}{10} \times \frac{1}{4}$

$\frac{128}{10} \times \frac{1}{4} = \frac{128}{40}$

$3\frac{8 \div 8}{40 \div 8}$ $\frac{1}{5}$

$$\begin{array}{r} 3 \\ 40\overline{)128} \\ -120 \\ \hline 8 \end{array}$$

23) 3.2 or $3\frac{1}{5}$ gal

24) How many 0.35-ounce packages of cinnamon can be made with 3.8 ounces of cinnamon?

$$\begin{array}{r} 10.85 \\ 035.\overline{)3.80.00} \\ -35 \\ \hline 30 \\ -280 \\ \hline 200 \\ -175 \\ \hline 250 \end{array}$$

$$\begin{array}{r} 4 \\ 35 \\ \times\ 8 \\ \hline 280 \end{array}$$ $$\begin{array}{r} 2 \\ 35 \\ \times 5 \\ \hline 175 \end{array}$$

bad question, sorry!

24) about 10 packages