7ᵗʰ Grade RED CHAPTER 2 Practice 1

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

1) $-\frac{4}{5}$

$$\begin{array}{r} 0.8 \\ 5\overline{|40} \end{array}$$

$\boxed{-0.8}$

1) $\underline{-0.8}$

2) $3\frac{4}{9}$

$$\begin{array}{r} 0.4 \\ 9\overline{|40\ 0} \\ -36\downarrow \\ \hline 40 \end{array}$$

$\boxed{3.\overline{4}}$

2) $\underline{3.\overline{4}}$

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

3) 2.125

$$\frac{125}{1000}$$

$$\begin{array}{l} 5|125 \quad 1000 \\ 5|25 \quad 200 \\ 5|5 \quad 40 \\ \hline 1 \quad 8 = \frac{1}{8} \end{array}$$

$\boxed{2\frac{1}{8}}$

3) $\underline{2\frac{1}{8}}$

4) −0.95

$$\frac{95}{100}$$

$$\begin{array}{l} 5|95 \quad 100 \\ 19 \quad 20 = \frac{19}{20} \end{array}$$

$\boxed{-\frac{19}{20}}$

4) $\underline{-\frac{19}{20}}$

Complete the statement using <, >, or =. (1pt each)
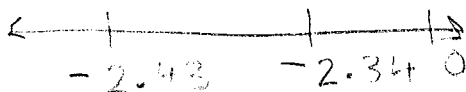
5) $\frac{16}{11}$ ■ $1.\overline{45}$

$$\begin{array}{l} 1.45 \\ 11\overline{|16\ 0} \\ 11\downarrow \\ \hline 50 \\ 44 \\ \hline 60 \end{array}$$

$$\begin{array}{l} 50 \\ -44 \\ \hline 60 \end{array}$$

$1.\overline{45} \boxed{=} 1.\overline{45}$

5) $\underline{=}$

6) −2.34 ■ − 2.43

$-2.34 \boxed{>} -2.43$

6) $\underline{>}$

7) You spend $3\frac{2}{3}$ hours hiking and an additional $\frac{3}{4}$ hour to rest. How much time did you spend in total?

$$3\frac{2\times4}{3\times4} + \frac{2\times3}{4\times3}$$

$$3\frac{8}{12} \Big\rangle \quad \frac{17}{12} \text{ or } 1\frac{5}{12}$$

$$+ \quad \frac{9}{17}$$

$$3\frac{5}{12}$$
$$+ 1\frac{5}{12}$$
$$\overline{4\frac{5}{12} \text{ hours}}$$

7) $\underline{4\frac{5}{12}\text{ hr}}$

Add or subtract. Write fractions in simplest form.

8) $15.36 + -12.095$

$$15.363$$
$$-12.095$$
$$\overline{3.265}$$

8) $\underline{3.265}$

9) $-3\frac{7}{9} + -2\frac{1}{3}$

$$3\frac{7}{9} \quad 3\frac{7}{9}$$
$$+ 2\frac{1\times3}{3\times3} \quad +2\frac{3}{9}$$
$$\frac{10}{9} \text{ or } 1\frac{1}{9}$$

$$3$$
$$+2$$
$$+1\frac{1}{9}$$
$$\overline{6\frac{1}{9}}$$

$$\boxed{-6\frac{1}{9}}$$

9) $\underline{-6\frac{1}{9}}$

10) $\frac{13}{4} - -4\frac{9}{10}$

$$\frac{13}{4} + 4\frac{9}{10}$$

$$3\frac{1\times5}{4\times5} + 4\frac{9\times2}{10\times2}$$

$$3\frac{5}{20}$$
$$+4\frac{18}{20}$$
$$\overline{\frac{23}{20} \text{ or } 1\frac{3}{20}}$$

$$3$$
$$+4$$
$$+1\frac{3}{20}$$
$$\overline{8\frac{3}{20}}$$

10) $\underline{8\frac{3}{20}}$

11) $-7.91 - -5.28$

$$-7.91 + 5.28$$

$$7.\overset{8}{\cancel{9}}1$$
$$-5.28$$
$$\overline{-2.63}$$

$\underline{-2.63}$

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

12)
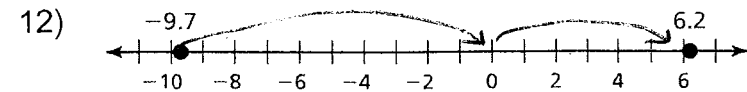
$$9.7$$
$$+6.2$$
$$\overline{15.9}$$

12) $\underline{15.9}$

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

13)

$-8\frac{3}{8}$ $-1\frac{1}{12}$

$8\frac{3}{8}\times 3$

$-1\frac{1}{12}\times 2$

$8\frac{9}{24}$

$-1\frac{2}{24}$

$7\frac{7}{24}$

13) $7\frac{7}{24}$

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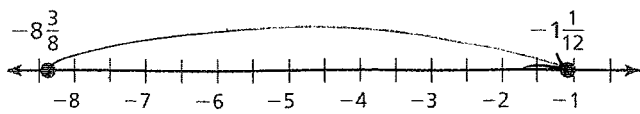
14) The table shows the changes in rainfall (in inches) from the monthly average of four months. What is the mean change?

Month	May	June	July	Aug.
Change (in.)	1.05	−0.58	−2.12	−2.67

1.05
$+-0.58$
$+-2.12$
$+-2.67$
-4.32

-1.08
$4\overline{)-4.32}$
$=4\frac{}{}$
032

14) -1.08 in.

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15) You buy a bag of dog food for $12.59 and a bottle of dog shampoo for $4.75. How much more did the dog food cost than the shampoo?

12.59
-4.75
7.84

15) $\$7.84$

Evaluate. Write fractions in simplest form.

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

$3\frac{1}{5} + 3\frac{1}{2}$

$6\frac{7}{10} + -1 = 5\frac{7}{10}$

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

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17) $2.4 - |-3.61| - -8.3$

$2.4 - 3.61$

3.61
-2.40
-1.21

$-1.21 + 8.3$

8.30
-1.21
7.09

17) 7.09

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18) $7.452 \div -2.16$

3.45
$2.16\overline{)745.2}$

18) -3.45

Evaluate. Write fractions in simplest form.

19) $-2\frac{1}{3} \times 5\frac{1}{4}$

$$\frac{7}{3} \times \frac{21^7}{4} = \frac{49}{4} = -12\frac{1}{4}$$

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

$-\frac{3}{2} \times -\frac{3}{2} = \frac{9}{4}$ or $2\frac{1}{4}$

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

$2\frac{1 \times 3}{4 \times 3} - 1\frac{1 \times 2}{6 \times 2}$

$2\frac{3}{12}$
$-1\frac{2}{12}$
_____
$1\frac{1}{12}$

20) $1\frac{1}{12}$

21) $0.1 \times (-10.5) - 4.76$

$-1.05 - 4.76$
$-1.05 + -4.76$

1.05
$+4.76$
_____
-5.81

21) -5.81

22) A recipe calls for $2\frac{1}{2}$ cups of sugar. You have $2\frac{1}{3}$ cups of sugar. Do you have enough sugar? Explain how you found your answer

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

Answer: NO

The answer is no because if you find a common denominator the sugar needed is $2\frac{3}{6}$ c. and you only have $2\frac{2}{6}$ c.

23) A 10.5gallon aquarium is $\frac{2}{3}$ full. How many more gallons of water does it take to fill the aquarium?

$3\overline{)10.5}$ with 3.5 and working shown, 16

23) 3.5 gal

24) How many 0.45-ounce packages of cinnamon can be made with 3.15 ounces of cinnamon?

$0.45\overline{)3.15}$ $45\overline{)315}$ (quotient 7)

24) 7 packs