2.1: Rational Numbers

Write the decimal as a fraction or the fraction as a decimal

1. 0.51
2. 0.731
3. $\frac{3}{5}$
4. $\frac{7}{8}$

Evaluate the expression

1. $\frac{1}{4}+\frac{13}{20}$
2. $\frac{14}{15}-\frac{1}{3}$
3. $\frac{3}{7}∙\frac{9}{10}$
4. $\frac{4}{5}÷\frac{16}{17}$

**Rational Number:**

**Any number that can be written in the form of *a*/*b* where *a* and *b* are integers and b is not equal to zero**

**24/0 = undefined**

**0/24 = 0**

Order the following rational numbers from least to greatest

1. $-0.5, 1.25 ,-\frac{1}{3} , 0.5, -\frac{5}{3}$
2. $-\frac{7}{4} , 1.1 ,\frac{1}{2} ,-\frac{1}{10},-1.3$

**terminating decimal:**

**repeating decimal:**

Write the rational number as a decimal

1. $\frac{-6}{5}$
2. $-7\frac{3}{8}$
3. $\frac{-3}{11}$

\**If p and q are integers, then* $-\frac{p}{q}=\frac{-p}{q}=\frac{p}{-q}$

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

1. -0.7
2. 0.125
3. -3.1
4. -10.25

Name Date

Practice A

2.1

Write the rational number as a decimal.

 1.  2.  3.  4. 

 5.  6.  7.  8. 

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

 9.  10.  11.  12. 

 13.  14.  15.  16. 

Order the numbers from least to greatest.

 17.  18. 

 19.  20. 

 21. You receive two quarters, one dime, and four pennies back in change.

 a. Write the amount as a decimal.

 b. Write the amount as a fraction in simplest form.

 22. In football, a completion percentage is the number of completions
divided by the number of passes. Does Tom or Ian have a higher completion percentage?

|  |  |  |
| --- | --- | --- |
| Player | Passes | Completions |
| Tom | 22 | 10 |
| Ian | 18 | 9 |

 23. You get 17 out of 22 questions correct on a math test.

 a. What is your percent of correct answers?

 b. The lowest score to pass is 70%. Did you pass the test?

 c. What is the minimum number of correct answers needed in order
to pass the test?

Name Date

Practice B

2.1

Write the rational number as a decimal.

 1.  2.  3.  4. 

 5.  6.  7.  8. 

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

 9.  10.  11.  12. 

 13.  14.  15.  16. 

 17. You caught a red snapper that is  inches long. Your friend caught a red snapper that is  inches long. Who caught the larger red snapper?

Copy and complete the statement using or 

 18.    19.    20.   

 21. Find one terminating decimal and one repeating decimal between  and 

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Time | 4:00 a.m. | 10:00 a.m. | 4:00 p.m. | 10:00 p.m. |
| Change (feet) |  |  |  |  |

 22. The table gives the tidal
changes in the water
level of a lagoon for
every six hours of a
given day.

 a. Order the numbers from least to greatest.

 b. At what time(s) did the water level decrease?

 c. What was the largest change in water level?

 d. Did the tidal change in part (c) involve an increase or a decrease in water level?

 e. Will the next tidal change be an increase or decrease in water level? Explain.