



Rational Number

Real Nu

A number that can be converted into a fraction $\frac{a}{b}$, $b \neq 0$

Integers

$\{ \dots, -3, -2, -1, 0, 1, 2, 3, \dots \}$

Whole Numbers

$\{ 0, 1, 2, 3, \dots \}$

Natural Numbers

$\{ 1, 2, 3, 4, \dots \}$

Decimals that are terminating

ex.

$\frac{1}{2} = 0.5$

Decimals that are repeating

ex.

$\frac{1}{3} = 0.\overline{3}$

Irrational Numbers

Irrational Numbers

A number that can't be converted into a fraction

Decimals that are not terminating and not repeating.

ex.

$$\frac{29}{19} = 1.52631578947$$

P. 122 Decimal & Fraction Forms Sept 13
(Continued)

38. bar notation

$$0.31313 \dots$$

$$0.\overline{31}$$

44. Write as a decimal

$$\frac{2}{3} = 0.6$$

45. $-\frac{7}{8} = -0.875$

53.

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

period 2
length: 1

55.

$$-\frac{1}{6} = 0.\overline{16}$$

period: 6
length: 1

59.

less than
greater than
equal to

$\frac{1}{2} < \frac{3}{4}$

60.

$$\begin{array}{r} -2 \times 4 \\ -3 \\ \hline 3 \times 4 \\ 4 \\ \hline -8 \\ 12 \end{array} > \begin{array}{r} -3 \\ 4 \\ \hline -9 \\ 12 \end{array}$$

$$65. \quad 0.3 < 0.\overline{3}$$

$$\# 0.30 < \# 0.3\overline{3}$$

$$67. \quad 1.21 = 1 \frac{21}{100}$$

$$69. \quad -\frac{7}{8} = -0.875$$

$$-0.875$$

75 least to greatest

$\frac{1}{2}$, $\frac{1}{3}$, $\frac{3}{5}$, 0.59

0.50, $0.\overline{33}$, 0.60, 0.59

$\frac{1}{3}$, $\frac{1}{2}$, 0.59, $\frac{3}{5}$

76. 0.71, $0.\overline{71}$, $\frac{711}{1000}$, $0.\overline{7}$

0.71, 0.711, $0.\overline{71}$, $0.\overline{7}$

p. 128 Multiplying + Dividing Rational Numbers

$$1. \quad -8 \times \frac{1}{2} \times \left(-1 \frac{1}{4}\right)^2 - 6 \frac{2}{3} \times 3 \frac{1}{2}$$

$$= -\frac{17}{2} \times \left(-\frac{5}{4}\right)$$

$$= \frac{85}{8}$$

$$= -\frac{20}{3} \times \frac{7}{2}$$
$$= -\frac{140}{6}$$

$$= -\frac{70}{3}$$

$$5. \quad -5.6 \times (-7.8) \\ = \underline{\underline{43.68}}$$

$$10. \quad \frac{5}{8} \times \frac{2}{3}$$

$$= \frac{10}{24} \\ = \frac{5}{12}$$

$$8. \quad -\frac{2}{7} \times \left(-\frac{7}{2}\right)$$

$$= \frac{14}{+14}$$

14
14 ✓

$$13. \quad -0.46 \times (-0.5) \\ = 0.23$$

$$22. \quad -2.25 \times (-1.4) \\ = 3.15$$

homework,
finish 122-3 start at
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