

Chapter 3 Review

① Rational & Irrational #'s

terminating
OR

Repeating dec.

ex $\frac{7}{4}$

ex $\sqrt{0.5}$

ex $\frac{0}{3}$

change
to
decimals

non-terminating,
non-repeating

ex: π

ex: $\sqrt{2}$

ex: $\frac{9}{14}$

Arranging from smallest to largest.

$$-\frac{2}{3}, \frac{1}{2}, -\frac{3}{4}, -\frac{5}{6}, \frac{3}{8}, \frac{1}{6}$$

$$-0.\overline{6}, 0.5, -0.75, -0.8\overline{3}, 0.375, 0.1\overline{6}$$

$$-\frac{5}{6}, -\frac{3}{4}, -\frac{2}{3}, \frac{1}{6}, \frac{3}{8}, \frac{1}{2}$$

greater than & less than.

$$-\frac{2}{5} \boxed{>} -\frac{3}{7}$$

-0.40 -0.43

$$-\frac{14}{35} \boxed{>} -\frac{15}{35}$$

⑤ Sum, Difference, Product, Quotient of Rational #'s.

$$\text{ex: } \begin{array}{l} 4.18 + (+4.1) \\ 4.18 + 4.1 \\ = 8.28 \end{array} \quad \Bigg| \quad \begin{array}{l} -0.9 \div -8.7 \\ 0.103 \end{array}$$

$$\frac{3}{6} + \frac{-5}{6} = \frac{-2}{6}$$

$$\frac{24}{1} \times \frac{-3}{10} = \frac{-72}{10} = \frac{-36}{5}$$

$$5\frac{4}{5} \div -\frac{2}{1}$$
$$\frac{29}{5} \times -\frac{1}{2}$$

$$\left(-\frac{29}{10}\right) = -2\frac{9}{10}$$

$$3\frac{1}{8} \div -1\frac{5}{7}$$

$$\frac{25}{8} \div -\frac{12}{7}$$

$$\frac{25}{8} \times -\frac{7}{12}$$

$$\frac{-175}{96}$$

$$\left(2 + \frac{3}{2} + 2\frac{1}{3}\right) \div 1\frac{1}{6}$$

$$\left(\frac{2}{1} + \frac{3}{2} + \frac{7}{3}\right) \div 1\frac{1}{6}$$

$$\left(\frac{12}{6} + \frac{9}{6} + \frac{14}{6}\right) \div \frac{7}{6}$$

$$\frac{\cancel{5}^5 \cancel{35}^1}{\cancel{1}^1 \cancel{6}^6} \times \frac{\cancel{6}^1}{\cancel{7}^7} = \frac{5}{1} = 5$$

$$\left(-3\frac{5}{4}x - 1\frac{1}{5}\right) \div \left(4 - 2\frac{3}{4}\right)$$

$$\left(-\frac{23}{\cancel{16}}x - \frac{\cancel{16}}{5}\right) \div \left(\frac{\cancel{4}^4}{\cancel{1}_4} - \frac{11}{4}\right)$$

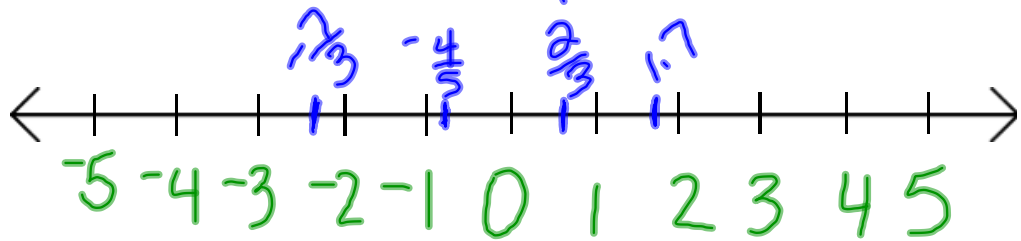
$$\left(\frac{23}{5}\right) \div \left(\frac{16}{4} - \frac{11}{4}\right)$$

$$\frac{23}{5} \div \frac{5}{4}$$

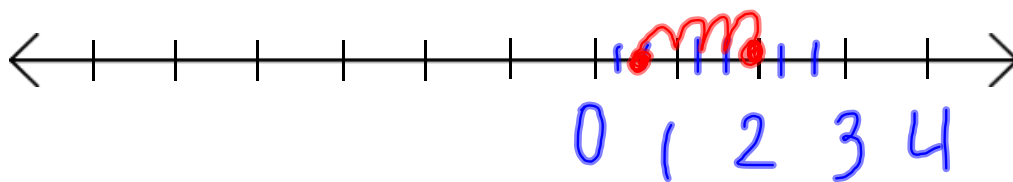
$$\frac{23}{5} \times \frac{4}{5} = \frac{92}{25}$$

$$\begin{aligned} & 5 \div 1.4 \times (1.7^2) \div 5.6 \\ & (5 \div 1.4) \times 2.89 \div 5.6 \\ & (3.57 \times 2.89) \div 5.6 \\ & (10.3173 \div 5.6) \\ & 1.84 \end{aligned}$$

$$-\frac{4}{5}, \frac{2}{3}, 1.7, -\frac{7}{3} = -2\frac{1}{3}$$



$$\left(\frac{2}{3}\right) + \frac{4}{3}$$



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

$$\frac{15}{4} = 3\frac{3}{4}$$