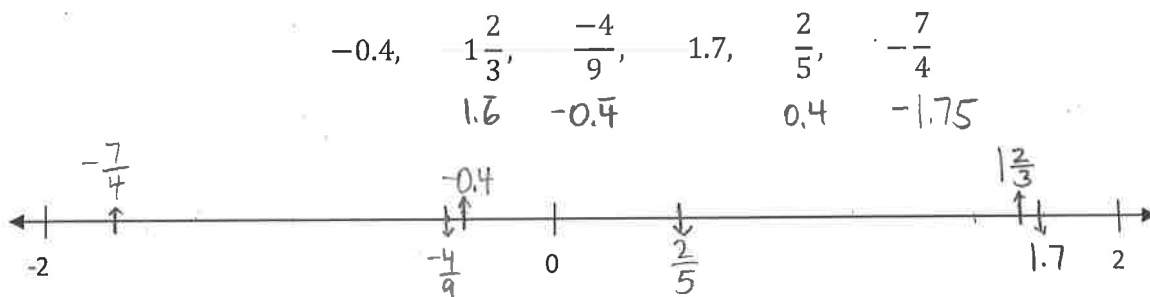


Name: KEY

Date: _____

Chapter 3 Practice Test

1) Order the rational numbers and place in the appropriate spot on the number line.



2) Identify two rational numbers between the set of numbers. b) -1.05 and -1.06 b) $\frac{3 \times 3}{5 \times 3}$ and $\frac{2 \times 5}{3 \times 5}$

a) -1.053 , -1.055 b) $\frac{91}{150}$, $\frac{97}{150}$

$\frac{9 \times 10}{15 \times 10}$ $\frac{10 \times 10}{15 \times 10}$
 $\frac{90}{150}$ $\frac{100}{150}$

3) Simplify (answers in lowest terms).

a) $\frac{-5}{6} + \frac{2 \times 2}{3 \times 2}$
 $\frac{-5}{6} + \frac{4}{6} = \left(\frac{-1}{6}\right)$

b) $\frac{-3}{8} - \frac{1}{-3}$
 $\frac{-3 \times 3}{8 \times 3} + \frac{1 \times 8}{3 \times 8}$
 $\frac{-9}{24} + \frac{8}{24} = \left(\frac{-1}{24}\right)$

c) $1\frac{3}{4} + 2\frac{1}{6}$
 $\frac{7 \times 3}{4 \times 3} + \frac{13 \times 2}{6 \times 2}$
 $\frac{21}{12} + \frac{26}{12}$
 $= \left(\frac{47}{12}\right)$

d) $\frac{-3}{5} + -3\frac{2}{3}$
 $\frac{-3 \times 3}{5 \times 3} + \frac{-11 \times 5}{3 \times 5}$
 $\frac{-9}{15} + \frac{-55}{15}$
 $= \left(\frac{-64}{15}\right)$

4) Simplify (answers in lowest terms).

$$a) \frac{8^{\cancel{+4}}}{9^{\cancel{-3}}} \times \frac{-3^{\cancel{-3}}}{4^{\cancel{+4}}}$$

$$\frac{2}{3} \times \frac{-1}{1} = \left(\frac{-2}{3} \right)$$

$$b) 3 \times \frac{2}{-7}$$

$$\frac{3}{1} \times \frac{-2}{7} = \left(\frac{-6}{7} \right)$$

$$c) -2\frac{1}{3} \times -1\frac{5}{6}$$

$$\frac{-7}{3} \times \frac{-11}{6} = \left(\frac{77}{18} \right)$$

$$d) \frac{5}{-7} \div \frac{-20}{21}$$

$$\frac{-5^{\cancel{+5}}}{7^{\cancel{-7}}} \times \frac{-21^{\cancel{-7}}}{20^{\cancel{-5}}}$$

$$\frac{-1}{1} \times \frac{-3}{4} = \left(\frac{3}{4} \right)$$

$$e) \frac{7}{8} \div 2$$

$$\frac{7}{8} \div \frac{2}{1}$$

$$= \frac{7}{8} \times \frac{1}{2} = \left(\frac{7}{16} \right)$$

$$f) 3\frac{1}{8} \div -2\frac{3}{4}$$

$$\frac{25}{8} \div \frac{-11}{4}$$

$$\frac{25}{8^{\cancel{-4}}} \times \frac{-4^{\cancel{-4}}}{11}$$

$$\frac{25}{2} \times \frac{-1}{11} = \left(\frac{-25}{22} \right)$$

5) Evaluate.

$$a) \left(\frac{1}{3} \right) \left(\frac{-4}{3} \right) + \frac{2}{6}$$

$$\frac{-4^{\cancel{x2}}}{9^{\cancel{x2}}} + \frac{2^{\cancel{x3}}}{6^{\cancel{x3}}}$$

$$\frac{-8}{18} + \frac{6}{18} = \frac{-2}{18} = \left(\frac{-1}{9} \right)$$

$$b) (-2) \left(\frac{-3}{4} \right) + \left(\frac{1}{2} \right)^3$$

$$\frac{-2^{\cancel{x2}}}{1} \left(\frac{-3}{4^{\cancel{-2}}} \right) + \frac{1^3}{2^3}$$

$$\left(\frac{-1}{1} \right) \left(\frac{-3}{2} \right) + \frac{1}{8}$$

$$\frac{3^{\cancel{x4}}}{2^{\cancel{x4}}} + \frac{1}{8} = \frac{12}{8} + \frac{1}{8} = \left(\frac{13}{8} \right)$$