

Section 1.1 Extra Practice

1. Circle the rational numbers in the list below:

17
 $\frac{17}{1}$

$\frac{5}{0}$
can't \div by 0

-3.606
 $-3\frac{606}{1000}$

$\sqrt{3}$
 $1.7320\dots$

$-\frac{3}{4}$
 ~~$\frac{3}{4}$~~ $-\frac{35}{4}$

2. Circle the greater number. In each pair

a) $\frac{9}{19}$, $\frac{10}{20}$
less than half $0.4736\dots$ half 0.5

b) $-\frac{23}{3}$, $-\frac{21}{2}$
 $-\frac{46}{6}$ $-\frac{63}{2}$
further into negative (smaller)

f) $-\frac{5}{7}$, $-\frac{7}{5}$
further into negative (smaller)

3. Express each rational number as a fraction (or mixed number) in lowest terms.

a) $7 \div (-14)$
 $-\frac{7 \div 7}{14 \div 7} = \boxed{-\frac{1}{2}}$

b) $-75 \div 100$
 $-\frac{75 \div 25}{100 \div 25} = \boxed{-\frac{3}{4}}$

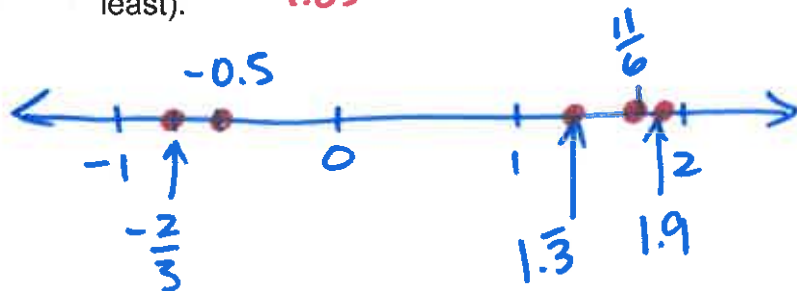
c) -4.4
 $-4\frac{4}{10} \div 2 = \boxed{-4\frac{2}{5}}$

4. Compare $-\frac{3}{4}$, 1.7 , -0.6 , $1\frac{1}{2}$, and $-0.\bar{6}$. Write the numbers in ascending order (least to greatest).



$-\frac{3}{4}, -0.\bar{6}, -0.6, 1\frac{1}{2}, 1.7$

5. Compare -0.5 , $\frac{11}{6}$, $-\frac{2}{3}$, 1.9 , and $1.\bar{3}$. Write the numbers in descending order (greatest to least).



$1.9, \frac{11}{6}, 1.\bar{3}, -0.5, -\frac{2}{3}$



6. For each of the following pairs of rational numbers: ~~ANS~~

- write the rational numbers in decimal form
- identify a decimal number between the pair of decimal numbers

answers may vary

a) $\frac{1}{4}, \frac{1}{2}$ b) $-\frac{1}{10}, -\frac{1}{8}$ c) $-1\frac{3}{4}, -1\frac{4}{5}$

0.25 0.50 -0.100 -0.125 -1.75 -1.80

$\boxed{0.3}$ $\boxed{-0.11}$ $\boxed{-1.79}$

7. For each of the following pairs of rational numbers:

- write the rational numbers in fraction form
- identify a fraction between the pair of fractions

answers may vary

a) 0.8, 0.9 b) -0.65, -0.66 c) -0.9, -1

$\frac{8}{10}$ $\frac{9}{10}$ $-\frac{65}{100}$ $-\frac{66}{100}$ $-\frac{9}{10}$ -1

$\frac{16}{20}$ $\frac{18}{20}$ $-\frac{130}{200}$ $-\frac{132}{200}$ $-\frac{18}{20}$ $-\frac{20}{20}$

$\boxed{\frac{17}{20}}$ $\boxed{-\frac{131}{200}}$ $\boxed{-\frac{19}{20}}$

8. Estimate, then calculate the square of each number.

a) 4.7 $\boxed{22.09}$ b) 0.8 $\boxed{0.64}$

between 4^2 and 5^2
16 and 25
closer to $5^2 \rightarrow$ estimate
is about 22

will be less than 1^2
 $8 \times 8 = 64$
about 0.64

9. Given the area of each square, determine its side length. Express your answer to the nearest hundredth.

don't forget units!

a) 60.5 cm^2

$$\sqrt{60.5} = 7.7781\dots$$

$$= \boxed{7.78 \text{ cm}}$$

b) 0.92 m^2

$$\sqrt{0.92} = 0.9591\dots$$

$$= \boxed{0.96 \text{ m}}$$