Please complete this assignment in your Assignment Book. Remember to include the proper headings: your name; date; and title of the assignment.

### 2.1 Comparing and Ordering Rational Numbers Worksheet

1. Identify the rational numbers.
a) 17
$\frac{5}{0}$
$-3.606$
$\sqrt{3}$
$-8 \frac{3}{4}$
b) -0.2
$9 . \overline{12}$
$\frac{0}{0}$
$-\frac{13}{4}$
7.1234...
2. Write the opposite of each rational number.
a) 9
b) $-\frac{23}{3}$
c) -17.6
d) $6 . \overline{12}$
e) 401
f) $-7 \frac{5}{7}$
3. Match each letter on the number line to one of the following rational numbers.

$\frac{7}{4}$
$-0.3$
$2 \frac{1}{5}$
$-\frac{1}{3}$
$-2.1$
$-0.4 \overline{9}$
4. Compare $-\frac{3}{4}, 1.7,-0.6,1 \frac{1}{2}$, and $-0 . \overline{6}$. Write the numbers in ascending order.
5. Compare $-0.5, \frac{11}{6},-\frac{2}{3}, 1.9$, and $1 . \overline{3}$. Write the numbers in descending order.
6. Identify the equivalent fraction pairs.
a) $-\frac{10}{4}, \frac{-10}{-4}$
b) $-\frac{7}{14},-\frac{1}{2}$
c) $\frac{-5}{-2}, \frac{5}{2}$
7. Identify the equivalent rational number pairs.
a) $\frac{-3}{-2}, 1 \frac{1}{2}$
b) $4 . \overline{6}, 4 \frac{2}{3}$
c) $-0.8, \frac{-4}{-5}$
8. Identify the smaller value in each pair.
a) $-\frac{1}{2}, \frac{3}{4}$
b) $\frac{7}{8}, \frac{8}{9}$
c) $-\frac{3}{7},-\frac{4}{7}$
d) $-\frac{1}{100},-\frac{1}{10}$
e) $-2 \frac{3}{4},-2 \frac{3}{8}$
f) $0,-\frac{1}{11}$
9. For each of the following pairs of rational numbers,
i) write the rational numbers in decimal form
ii) identify a decimal number between the pair of decimal numbers
a) $\frac{1}{4}, \frac{1}{2}$
b) $-\frac{2}{5},-\frac{3}{5}$
c) $-\frac{1}{10},-\frac{1}{8}$
d) $-\frac{2}{3},-\frac{5}{6}$
e) $-1 \frac{3}{4},-1 \frac{4}{5}$
f) $-1 \frac{19}{20},-2$
10. For each of the following pairs of rational numbers,
i) write the rational numbers in fraction form
ii) identify a fraction between the pair of fractions
a) $0.8,0.9$
b) $-0.65,-0.66$
c) $-0.9,-1$
11. Express each rational number as a fraction or mixed number in lowest terms.
a) $7 \div(-14)$
b) $-75 \div 100$
c) -4.4
12. Which integers are between $\frac{16}{3}$ and $\frac{-9}{2}$ ?
