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### 3.1 Practice - Rational Numbers

## *No calculators allowed for this assignment.

1. Sketch a number line and mark each rational number on it. Order the numbers from greatest to least: $-2.25, \frac{5}{4},-1.5,-\frac{1}{8}, 0.9$
2. Write the rational number represented by each letter on the number line, as a decimal.
a)

b)

c)

d)

3. Write the rational number represented by each letter on the number line, as a reduced mixed or improper fraction.
a)

b)

c)

d)

4. In each pair, which rational number is greater? Explain how you know.
a) $-7.3,-7.2$
b) $\frac{4}{5}, \frac{5}{4}$
c) $1.2,-1.3$
d) $-\frac{10}{13},-\frac{10}{11}$
5. In each pair, which rational number is less? Explain how you know.
a) $\frac{3}{4}, \frac{3}{5}$
b) $2 \frac{1}{2},-1 \frac{7}{8}$
c) $-\frac{13}{10},-\frac{13}{5}$
d) $-\frac{11}{3},-\frac{5}{6}$

### 3.1 Practice - Answers

1. 

 Greatest to least: $\frac{5}{4}, 0.9,-\frac{1}{8},-1.5,-2.25$
2. a) $\mathrm{A}:-7.9 \quad \mathrm{~B}:-7.2$
b) $C:-4.4 \quad D:-3.2$
c) J: -0.7 K: -0.2 $\quad$ d) G: $-15.37 \quad \mathrm{H}:-15.32$
3. a) $\mathrm{E}:-11 \frac{1}{4}$ or $-\frac{45}{4}$ F: $-10 \frac{3}{4}$ or $-\frac{43}{4}$
b) L: $-5 \frac{1}{8}$ or $-\frac{41}{8} \quad \mathrm{M}:-5 \frac{3}{4}$ or $-\frac{23}{4}$
c) $\mathrm{N}:-4 \frac{1}{6}$ or $-\frac{25}{6}$

P: $-3 \frac{2}{3}$ or $-\frac{11}{3}$
d) Q: $-\frac{9}{16} \quad$ R: $-\frac{3}{16}$
4. a) -7.2 is greater because it is to the right of -7.3 on a number line.
b) $\frac{5}{4}$ is greater because it is equal to $1 \frac{1}{4}$, which is greater than 1 , whereas $\frac{4}{5}$ is less than 1 .
c) 1.2 is greater since it is positive.
d) Making common denominators, $-\frac{10}{13}=-\frac{110}{143}$ and $-\frac{10}{11}=-\frac{130}{143}$ on a number line. Since -110 is greater than -130 , $-\frac{10}{13}$ is greater.
5. a) $\frac{3}{5}$
b) $-1 \frac{7}{8}$
c) $-\frac{13}{5}$
d) $-\frac{11}{3}$

