

## Comparing and Ordering Decimals and Fractions

### Example

Order the numbers from greatest to least.

	35.435	35.44	35.43	35.451	
<b>Greatest</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<b>Least</b>

### Intro

Compare 0.85 and  $\frac{5}{6}$ .

### Example

Compare each pair of numbers.

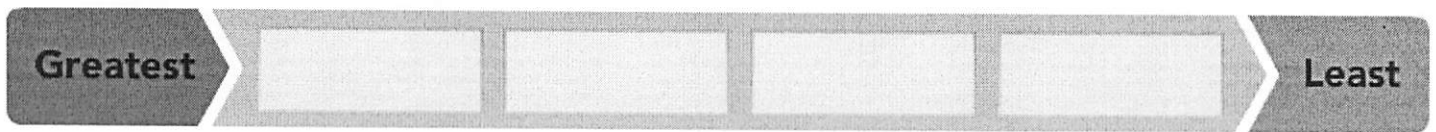
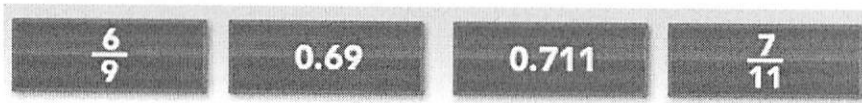
$$0.27 \quad \square \quad \frac{2}{7}$$

$$0.6 \quad \square \quad \frac{5}{8}$$

$$0.45 \quad \square \quad \frac{4}{9}$$

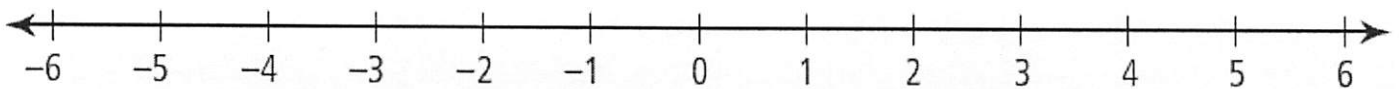
## Example

Order the numbers from greatest to least.

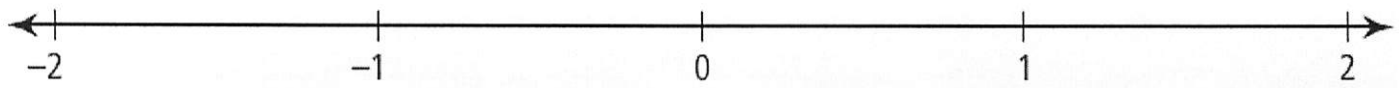


Plot the following rational numbers on the number line.

1.6, -6.85, -2.8, -0.4, 3.125, 0.9



$-\frac{7}{8}$ ,  $\frac{1}{4}$ ,  $-\frac{2}{3}$ ,  $\frac{4}{5}$ ,  $-1\frac{1}{2}$ ,  $\frac{7}{4}$



## Comparing and Ordering Decimals and Fractions

### Example

Order the numbers from greatest to least.

35.435

35.44

35.43

35.451

Greatest

35.451

35.44

35.435

35.43

Least

### Intro

Compare 0.85 and  $\frac{5}{6}$ .

$$\begin{array}{r}
 0.83 \\
 6 \overline{) 5.00} \\
 \underline{-0} \downarrow \\
 50 \\
 \underline{-48} \\
 20 \\
 \underline{-18} \\
 2
 \end{array}$$

$$0.85 > 0.83\dots$$

$$0.85 > \frac{5}{6}$$

### Example

Compare each pair of numbers.

$$0.27 \quad \boxed{<} \quad 0.285 \quad \frac{2}{7}$$

$$\begin{array}{r}
 0.285 \\
 7 \overline{) 2.000} \\
 \underline{-0} \downarrow \\
 20 \\
 \underline{14} \\
 60 \\
 \underline{-56} \\
 40
 \end{array}$$

$$0.6 \quad \boxed{<} \quad 0.625 \quad \frac{5}{8}$$

$$\begin{array}{r}
 0.625 \\
 8 \overline{) 5.000} \\
 \underline{-0} \downarrow \\
 50 \\
 \underline{-48} \\
 20 \\
 \underline{-16} \\
 40 \\
 \underline{-40} \\
 0
 \end{array}$$

$$0.45 \quad \boxed{>} \quad 0.44\dots \quad \frac{4}{9}$$

$$\begin{array}{r}
 0.44 \\
 9 \overline{) 4.00} \\
 \underline{-0} \downarrow \\
 40 \\
 \underline{-36} \\
 40 \\
 \underline{-36} \\
 4
 \end{array}$$

# Example

Order the numbers from greatest to least.

$\frac{6}{9}$	0.69	0.711	$\frac{7}{11}$
↓ $\frac{2}{3}$			↓ 0.636
0.666			

$$\begin{array}{r}
 11 \overline{) 7000} \\
 \underline{-0} \phantom{00} \\
 70 \phantom{00} \\
 \underline{-66} \phantom{00} \\
 40 \phantom{00} \\
 \underline{-33} \phantom{00} \\
 70 \phantom{00} \\
 \underline{-66} \phantom{00} \\
 4
 \end{array}$$

Greatest
0.711
0.69
 $\frac{6}{9}$ 
 $\frac{7}{11}$ 
Least

Plot the following rational numbers on the number line.

1.6, -6.85, -2.8, -0.4, 0.9, 3.125, 0.9

