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Module 5 Decimal Operations, Exponents, and Powers
Lesson 2 Converting, Comparing, and Ordering

## Lesson Notes

 5.2
## Lesson Objectives

- Convert, compare, and order fractions, decimals, and percents and find their approximate location on a number line.
- Compare and represent integers, fractions, and decimals and find their approximate location on a number line.


## Subtopic 1 Ordering Fractions, Decimals, and Integers

- On a number line, the number to the left is less than the number to the right.
- On a number line, the number to the right is greater than the number to the left.
- Zero is neither positive nor negative.
- Negative numbers lie to the left of zero on a number line.
- Positive numbers lie to the right of zero on a number line.

1
Order from greatest to least using place value. $0.55, \frac{1}{2},-1,2$

$$
\begin{aligned}
& 2>0.55>0.50>-1 \\
& 2>0.55>\frac{1}{2}>-1
\end{aligned}
$$

Order from greatest to least using a number line. $0.55, \frac{1}{2},-1,2$


$$
2>0.55>\frac{1}{2}>-1
$$

Order from least to greatest using place value. $0.96, \frac{4}{5},-\frac{1}{5}, 1$

$$
\begin{aligned}
& -\mathbf{0 . 2} \\
& \mathbf{0 . 8} \\
& \mathbf{0 . 9 6}
\end{aligned} \quad-\frac{1}{5}<\frac{4}{5}<\mathbf{0 . 9 6}<\mathbf{1}
$$

4 Order from least to greatest using a number line. $0.96, \frac{4}{5},-\frac{1}{5}, 1$


## Subtopic 2 Comparing Fractions, Decimals, and Percents

- To compare numbers that are in different forms, rewrite them all in the same form.
- To change a percent to a decimal, move the decimal point two places to the left.


Compare $\frac{3}{10}$ and -0.35. Write $>,<$, or $=$.


$$
\begin{aligned}
& 0.3>-0.35 \\
& \frac{3}{10}>-0.35
\end{aligned}
$$



Compare $30 \%$ and $\frac{1}{4}$. Write $>,<$, or $=$.

$$
\begin{aligned}
0.30 & >0.25 \\
30 \% & >\frac{1}{4}
\end{aligned}
$$

Compare 0.4 and $5 \%$. Write $>,<$, or $=$.

$$
\begin{aligned}
0.05 & <0.4 \\
0.4 & >5 \%
\end{aligned}
$$

