Relationships Between Digits in Numbers Notes

A digit in a certain place is worth
10 times as much as the same digit one place to the right.

If a digit is moved one place to the left, that digit will now be worth 10 times as much as before.

A 3 in the
hundreds place is worth 10 times as much as a 3 in the tens place. $300=30 \times 10$

| $\begin{aligned} & \infty \\ & \underline{0} \\ & \frac{1}{0} \\ & \frac{0}{5} \\ & 0 \\ & \hline 1 \end{aligned}$ | $\begin{aligned} & \frac{0}{0} \\ & 0 \\ & \frac{1}{0} \\ & \frac{1}{2} \\ & \frac{1}{2} \end{aligned}$ | $\begin{gathered} \infty \\ \stackrel{\infty}{0} \\ + \end{gathered}$ | $\begin{aligned} & \text { の } \\ & 0 \\ & \mathbf{c} \\ & \hline 0 \end{aligned}$ |  | $\begin{aligned} & \text { の } \\ & \hline \underset{\sim}{O} \\ & 0 \\ & \frac{1}{0} \\ & \frac{1}{2} \\ & \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $2$ | 3 | $9$ | $6$ | 4 |  |
| 5, | $3$ | 1 | $\begin{aligned} & \downarrow \\ & 6 . \end{aligned}$ | 7 |  |  |

A 6 in the ones place is worth 10 times as much as a 6 in the tenths place.

$$
6=0.6 \times 10
$$

A digit in a certain place is worth $\frac{1}{10}$ as much as the same digit one place to the left.

If a digit is moved one place to the right, that digit will now be worth $\frac{1}{10}$ as much as before.

An 8 in the hundreds place is worth $\frac{1}{10}$ the value of an 8 in the thousands place.

$$
800=\frac{1}{10} \times 8,000
$$

$$
800=8,000 \div 10
$$

| $\begin{aligned} & \infty \\ & \frac{0}{0} \\ & \frac{1}{} \\ & 0 \\ & 0 \\ & \hline \\ & \hline \end{aligned}$ | $\begin{aligned} & \frac{0}{0} \\ & \frac{1}{0} \\ & \frac{1}{0} \\ & \frac{1}{5} \\ & \end{aligned}$ | $\stackrel{\text { © }}{\stackrel{\sim}{\sim}}$ | $\begin{aligned} & \infty \\ & \underset{0}{\infty} \\ & \hline \end{aligned}$ | $\begin{aligned} & \infty \\ & \underset{\sim}{ \pm} \\ & \underset{\sim}{ \pm} \end{aligned}$ | $\begin{aligned} & \text { o } \\ & \frac{1}{0} \\ & \frac{1}{0} \\ & \frac{1}{0} \\ & \frac{5}{2} \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8, | 1 | 5 | 7. | $4$ |  |  |
|  | $\begin{aligned} & \downarrow \\ & 8 \end{aligned}$ | 6 | 0 | 2 | $\begin{aligned} & \downarrow \\ & 4 \end{aligned}$ | 3 |

A 4 in the
hundredths place is worth $\frac{1}{10}$ the value of $a 4$ in the tenths place.

$$
0.04=\frac{1}{10} \times 0.4
$$

$0.04=0.4 \div 10$

