$\qquad$

## Dividing Fractions

## Example:

| $\frac{1}{3}$ |  | $\frac{1}{3}$ |  |  | $\frac{2}{3} \div \frac{1}{6}$ <br> $\frac{1}{6}$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | $\left.\begin{array}{l}\frac{2}{3} \div \frac{1}{6}=\frac{2}{3} \times \frac{6}{1} \\ \Lambda_{\text {reciprocals }}\end{array}\right)$ |  |  |  |

Dividing by a number
is the same as multiplying by its reciprocal.

$$
\frac{2}{3} \times \frac{6}{1}=\frac{12}{3}=4
$$


C.

d.

| $\frac{1}{4}$ |  | $\frac{1}{4}$ |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| $\frac{1}{12}$ |  |  |  |  |  |  |  |  |  |  |

## ANSWER KEY

## Dividing Fractions

Example:

| $\frac{1}{3}$ |  | $\frac{1}{3}$ |  |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- |
| $\frac{1}{6}$ |  |  |  |  |  |

Dividing by a number
is the same as multiplying by its reciprocal.

$$
\begin{aligned}
& \frac{2}{3} \div \frac{1}{6} \\
& \frac{2}{3} \div \frac{1}{6}=\frac{2}{3} \times \frac{6}{1} \\
& \Lambda_{\text {reciprocals }} \uparrow
\end{aligned}
$$

$$
\frac{2}{3} \times \frac{6}{1}=\frac{12}{3}=4
$$


$\frac{5}{3} \div \frac{5}{9}=\frac{5}{3} \times \frac{7}{3}$
$\frac{1}{2} \div \frac{1}{8}=\frac{1}{2} \times \frac{0}{1}$
$\frac{3}{3} \times \frac{9}{3}=\frac{27}{9}=3$
$\frac{1}{2} \times \frac{8}{1}=\frac{8}{2}=4$
c.

| $\frac{1}{5}$ |  | $\frac{1}{5}$ |  | $\frac{1}{5}$ |  | $\frac{1}{5}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

$\frac{4}{5} \div \frac{4}{10}=\frac{4}{5} \times \frac{10}{4}$
$\frac{4}{5} \times \frac{10}{4}=\frac{40}{20}=2$
d.

| $\frac{1}{4}$ |  |  | $\frac{1}{4}$ |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| $\frac{1}{4}$ |  |  |  |  |  |  |  |  |  |  |  |  |

$\frac{2}{4} \div \frac{1}{12}=\frac{2}{4} \times \frac{12}{1}$
$\frac{2}{4} \times \frac{12}{1}=\frac{24}{4}=6$

