

$\begin{array}{r} 5 \\ \times 4 \\ \hline 20 \end{array}$	$\begin{array}{r} 9 \\ \times 6 \\ \hline 54 \end{array}$	$\begin{array}{r} 9 \\ \times 8 \\ \hline 72 \end{array}$	$\begin{array}{r} 6 \\ \times 8 \\ \hline 48 \end{array}$	$\begin{array}{r} 3 \\ \times 5 \\ \hline 15 \end{array}$	$\begin{array}{r} 1 \\ \times 7 \\ \hline 7 \end{array}$	$\begin{array}{r} 6 \\ \times 10 \\ \hline 60 \end{array}$	$\begin{array}{r} 11 \\ \times 7 \\ \hline 77 \end{array}$	$\begin{array}{r} 10 \\ \times 5 \\ \hline 50 \end{array}$	$\begin{array}{r} 1 \\ \times 10 \\ \hline 10 \end{array}$
$\begin{array}{r} 6 \\ \times 5 \\ \hline 30 \end{array}$	$\begin{array}{r} 4 \\ \times 5 \\ \hline 20 \end{array}$	$\begin{array}{r} 4 \\ \times 9 \\ \hline 36 \end{array}$	$\begin{array}{r} 8 \\ \times 3 \\ \hline 24 \end{array}$	$\begin{array}{r} 5 \\ \times 9 \\ \hline 45 \end{array}$	$\begin{array}{r} 11 \\ \times 5 \\ \hline 55 \end{array}$	$\begin{array}{r} 3 \\ \times 7 \\ \hline 21 \end{array}$	$\begin{array}{r} 7 \\ \times 2 \\ \hline 14 \end{array}$	$\begin{array}{r} 4 \\ \times 2 \\ \hline 8 \end{array}$	$\begin{array}{r} 8 \\ \times 8 \\ \hline 64 \end{array}$
$\begin{array}{r} 7 \\ \times 8 \\ \hline 56 \end{array}$	$\begin{array}{r} 1 \\ \times 3 \\ \hline 3 \end{array}$	$\begin{array}{r} 6 \\ \times 4 \\ \hline 24 \end{array}$	$\begin{array}{r} 2 \\ \times 10 \\ \hline 20 \end{array}$	$\begin{array}{r} 4 \\ \times 10 \\ \hline 40 \end{array}$	$\begin{array}{r} 9 \\ \times 5 \\ \hline 45 \end{array}$	$\begin{array}{r} 6 \\ \times 9 \\ \hline 54 \end{array}$	$\begin{array}{r} 2 \\ \times 6 \\ \hline 12 \end{array}$	$\begin{array}{r} 10 \\ \times 10 \\ \hline 100 \end{array}$	$\begin{array}{r} 4 \\ \times 8 \\ \hline 32 \end{array}$
$\begin{array}{r} 8 \\ \times 10 \\ \hline 80 \end{array}$	$\begin{array}{r} 6 \\ \times 6 \\ \hline 36 \end{array}$	$\begin{array}{r} 9 \\ \times 3 \\ \hline 27 \end{array}$	$\begin{array}{r} 4 \\ \times 3 \\ \hline 12 \end{array}$	$\begin{array}{r} 5 \\ \times 5 \\ \hline 25 \end{array}$	$\begin{array}{r} 7 \\ \times 10 \\ \hline 70 \end{array}$	$\begin{array}{r} 8 \\ \times 6 \\ \hline 48 \end{array}$	$\begin{array}{r} 3 \\ \times 4 \\ \hline 12 \end{array}$	$\begin{array}{r} 10 \\ \times 7 \\ \hline 70 \end{array}$	$\begin{array}{r} 5 \\ \times 10 \\ \hline 50 \end{array}$
$\begin{array}{r} 2 \\ \times 8 \\ \hline 16 \end{array}$	$\begin{array}{r} 5 \\ \times 2 \\ \hline 10 \end{array}$	$\begin{array}{r} 3 \\ \times 9 \\ \hline 27 \end{array}$	$\begin{array}{r} 11 \\ \times 2 \\ \hline 22 \end{array}$	$\begin{array}{r} 11 \\ \times 4 \\ \hline 44 \end{array}$	$\begin{array}{r} 6 \\ \times 7 \\ \hline 42 \end{array}$	$\begin{array}{r} 7 \\ \times 6 \\ \hline 42 \end{array}$	$\begin{array}{r} 11 \\ \times 6 \\ \hline 66 \end{array}$	$\begin{array}{r} 10 \\ \times 6 \\ \hline 60 \end{array}$	$\begin{array}{r} 7 \\ \times 5 \\ \hline 35 \end{array}$

GUESS WHAT WE GET TO USE TODAY...

CALCULATORS :-)

What kind of number is this?

$$\left\{ \frac{5}{10} \right. \quad \underline{\text{Fraction}}$$

Do we know what operation a fraction is?

Division

SO, use your calculator to find the decimals...

$$\frac{1}{11} = 0.0909090909$$



$$\frac{2}{11} = 0.1818181818$$



$$\frac{3}{11} = 0.2727272727$$

Now, without your calculator, can you predict what these decimals would be?

$$\frac{4}{11} = 0.363636 \dots \checkmark$$

$$\frac{5}{11} = 0.454545 \dots \checkmark$$

Use your calculator to see if we are right

Do we see a pattern with those decimals?

Adding 0.9 each time

Fractions

Repeating Decimal

A decimal that contains a digit, or group of digits, that repeat endlessly. (i.e., $\frac{2}{3} = 0.66666\dots$)

Terminating Decimal

A decimal that comes to an end and does not go on forever.

(i.e., $\frac{3}{6} = 0.5$)

Use your calculator to convert this fraction to a decimal (remember what operation we need to use)

$$\text{a) } \frac{1}{4} = 0.25 \quad \text{b) } \frac{2}{4} = 0.50$$

WHAT PATTERN DO WE SEE??

Increases by 0.25

Thinking of the pattern, predict the decimal:

$$(a) \frac{3}{4} = 0.75 \checkmark$$

Use a calculator when you need to.

1. a) Write each fraction as a decimal.

i) $\frac{2}{3}$

ii) $\frac{3}{4}$

iii) $\frac{4}{5}$

iv) $\frac{5}{6}$

v) $\frac{6}{7}$

b) Identify each decimal as terminating or repeating.

~~2. Write each decimal as a fraction.~~

~~a) 0.9~~

~~b) 0.25~~

~~c) 0.45~~

~~d) 0.01~~

~~e) 0.125~~

3. a) Write each fraction as a decimal.

i) $\frac{1}{27}$

ii) $\frac{2}{27}$

iii) $\frac{3}{27}$

b) Describe the pattern in your answers to part a.

c) Use your pattern to predict the decimal form of each fraction.

i) $\frac{4}{27}$

ii) $\frac{5}{27}$

iii) $\frac{8}{27}$