

ADDITION STRATEGIES

COUNT ON

Begin with the larger addend and count on when the smaller addend is 1, 2 or 3.

$5 + 1$



$5 + 1 = 6$

$8 + 2$



$8 + 2 = 10$

$6 + 3$

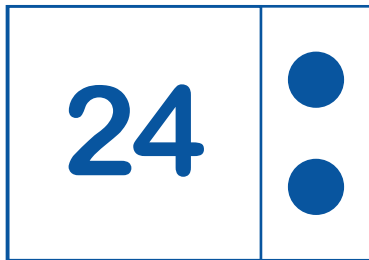


$6 + 3 = 9$

COUNT ON

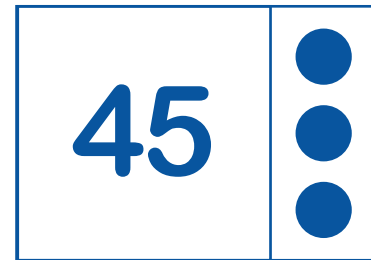
Begin with the larger addend and count on when the smaller addend is 1, 2 or 3.

$$24 + 2$$



$$24 + 2 = \boxed{26}$$

$$3 + 45$$

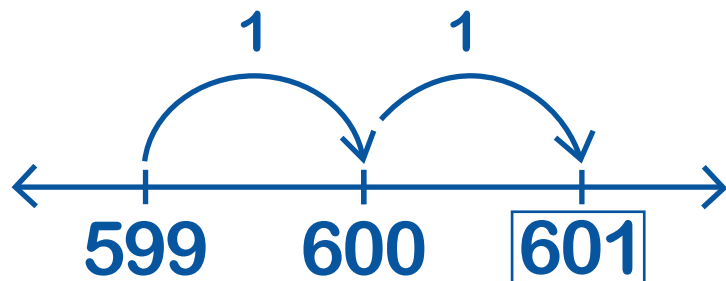


$$45 + 3 = \boxed{48}$$

COUNT ON

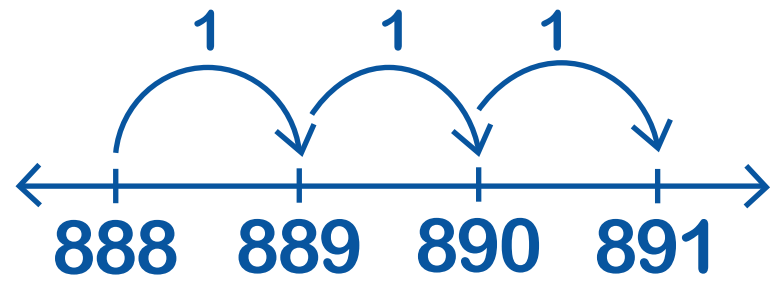
Begin with the larger addend and count on when the smaller addend is 1, 2 or 3.

$$599 + 2$$



$$599 + 2 = \boxed{601}$$

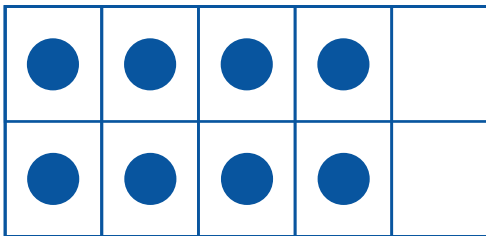
$$888 + 3$$



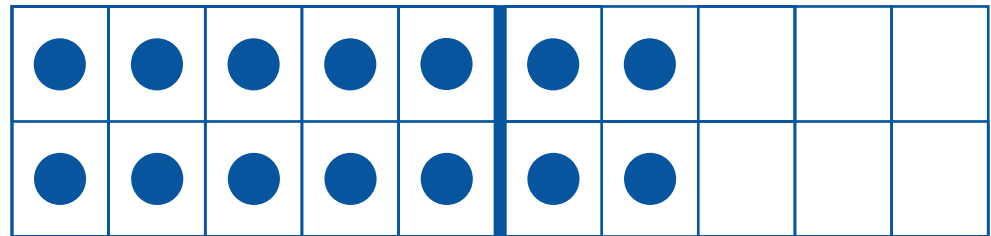
$$888 + 3 = \boxed{891}$$

DOUBLES FACTS

A number added to itself is a doubles fact.



$$4 + 4 = 8$$

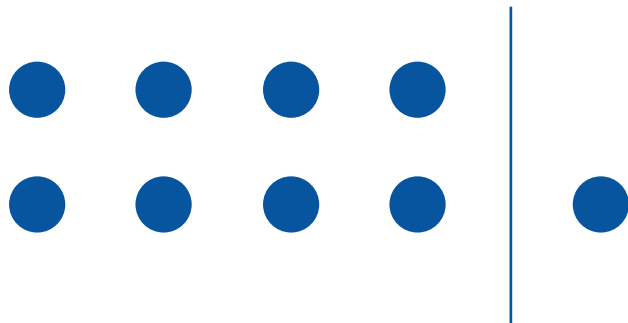


$$7 + 7 = 14$$

USE DOUBLES

Use doubles facts to help with near doubles.

$$4 + 5$$



$$4 + 5$$

4 1

$$4 + 4 + 1$$

8 + 1 = 9

USE DOUBLES

Use doubles facts to help with near doubles.

$$15 + 16$$

15 [^] 1

$$30 + 32$$

30 [^] 2

$$15 + 15 + 1$$

30 + 1 = 31

$$30 + 30 + 2$$

60 + 2 = 62

USE DOUBLES

Use doubles facts to help with near doubles.

$$300 + 302$$

\wedge
 $300 + 2$

$$398 + 399$$

\wedge \wedge
 $400 - 2$ $400 - 1$

$$300 + 300 + 2$$

$\underbrace{\hspace{10em}}$
 $600 + 2 = \boxed{602}$

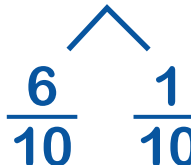
$$400 + 400 - 3$$

$\underbrace{\hspace{10em}}$
 $800 - 3 = \boxed{797}$

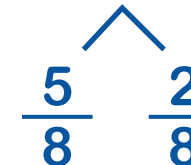
USE DOUBLES

Use doubles facts to help with near doubles.


$$\frac{6}{10} + \frac{7}{10}$$



$$\frac{5}{8} + \frac{7}{8}$$




$$\frac{6}{10} + \frac{6}{10} + \frac{1}{10}$$



$$\frac{12}{10} + \frac{1}{10} = \frac{13}{10} = \boxed{1\frac{3}{10}}$$


$$\frac{5}{8} + \frac{5}{8} + \frac{2}{8}$$




$$\frac{10}{8} + \frac{2}{8} = \frac{12}{8} = 1\frac{4}{8} = \boxed{1\frac{1}{2}}$$

USE DOUBLES


Use doubles facts to help with near doubles.

$$3.4 + 3.5$$


A diagram showing the number 3.5 being split into two parts: 3.4 and 0.1. A bracket above the 3.5 points down to these two numbers.


$$4.5 + 4.7$$


A diagram showing the number 4.7 being split into two parts: 4.5 and 0.2. A bracket above the 4.7 points down to these two numbers.

$$3.4 + 3.4 + 0.1$$


A diagram showing the first two terms of the equation, 3.4 and 3.4, being grouped together with a bracket underneath them.

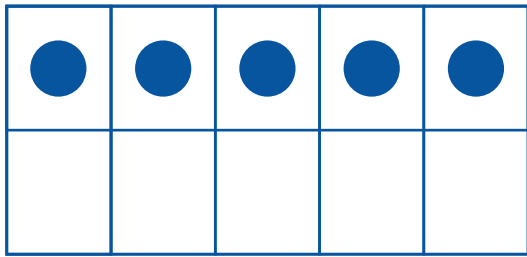
$$6.8 + 0.1 = \boxed{6.9}$$

$$4.5 + 4.5 + 0.2$$


A diagram showing the first two terms of the equation, 4.5 and 4.5, being grouped together with a bracket underneath them.

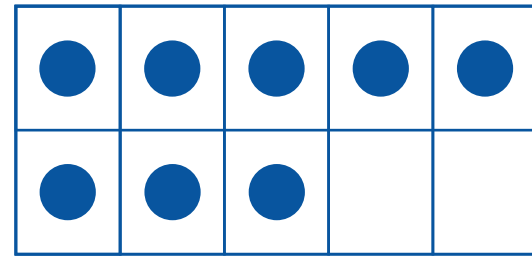
$$9 + 0.2 = \boxed{9.2}$$

FACTS OF TEN



I see 5 counters and
5 empty squares.
5 and 5 makes 10.

$$5 + 5 = 10$$



I see 8 counters and
2 empty squares.
8 and 2 makes 10.

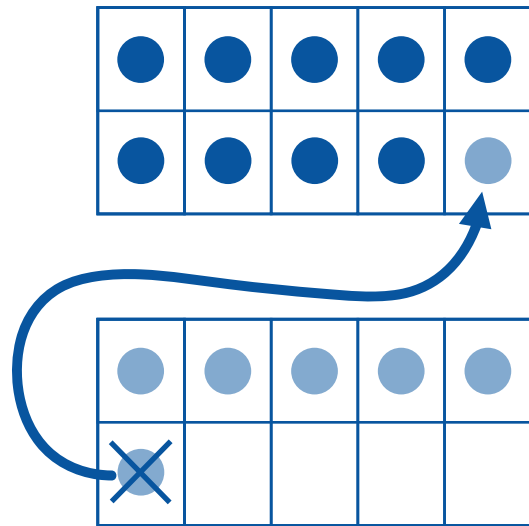
$$8 + 2 = 10$$

MAKE A TEN

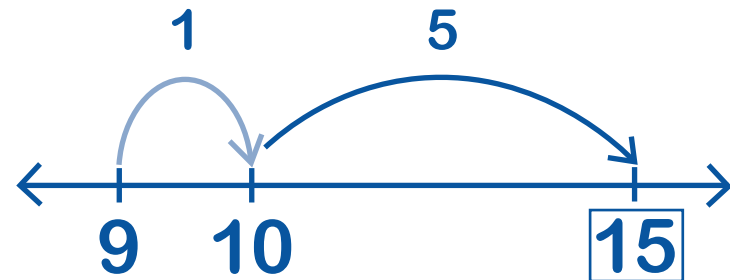
Partition one addend to make a ten.

$$9 + 6$$

1 5



$$9 + 6 = 10 + 5 = 15$$



$$9 + 6$$

1 5

$$9 + 6 = 10 + 5 = 15$$

MAKE A TEN

Partition one addend to make a multiple of ten.

$$28 + 16$$

2 14

$$28 + 16 = 30 + 14 = \boxed{44}$$

$$14 + 47$$

11 3

$$14 + 47 = 11 + 50 = \boxed{61}$$

MAKE A TEN

Partition one addend to make a multiple of ten.

The diagram shows the addition $148 + 33$. A blue oval circles the number 148. A bracket above the 33 is split into two parts: a '2' and a '31'. An arrow points from the '2' down to the equation below. The equation is $148 + 33 = 150 + 31 = 181$, with the final result 181 enclosed in a box.

$$148 + 33 = 150 + 31 = \boxed{181}$$

The diagram shows the addition $397 + 228$. A blue oval circles the number 397. A bracket above the 228 is split into two parts: a '3' and a '225'. An arrow points from the '3' down to the equation below. The equation is $397 + 228 = 400 + 225 = 625$, with the final result 625 enclosed in a box.

$$397 + 228 = 400 + 225 = \boxed{625}$$

MAKE A TEN

Partition one addend to make a multiple of ten.

$$398 + 47 = 400 + 45 = \boxed{445}$$

$$429 + 125 = 430 + 124 = \boxed{554}$$

MAKE A WHOLE

Partition one addend to make a whole number.

$$5\frac{4}{5} + 3\frac{2}{5}$$

$\frac{1}{5}$ $3\frac{1}{5}$

$$5\frac{4}{5} + 3\frac{2}{5} = 6 + 3\frac{1}{5} = \boxed{9\frac{1}{5}}$$

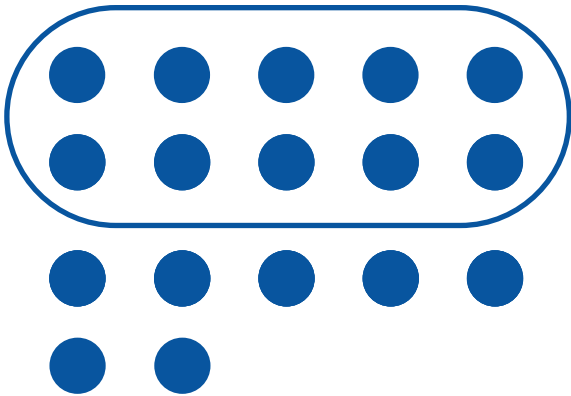
MAKE A WHOLE

Partition one addend to make a whole number.

$$\begin{array}{r} 3.9 + 1.6 \\ \quad \quad \quad \swarrow \quad \searrow \\ \quad \quad \quad 0.1 \quad 1.5 \\ \quad \quad \quad \downarrow \\ 3.9 + 1.6 = 4 + 1.5 = \boxed{5.5} \end{array}$$

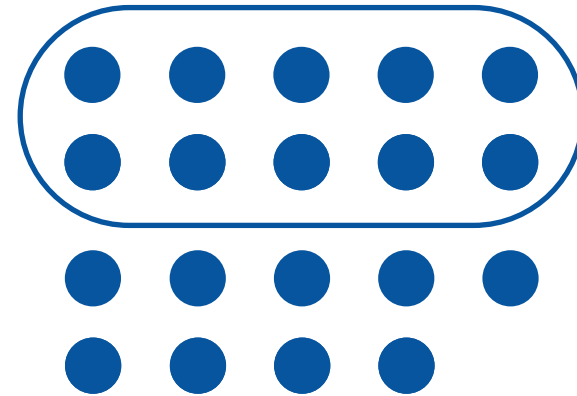
$$\begin{array}{r} 24.7 + 13.6 \\ \quad \quad \quad \swarrow \quad \searrow \\ \quad \quad \quad 0.3 \quad 13.3 \\ \quad \quad \quad \downarrow \\ 24.7 + 13.6 = 25 + 13.3 = \boxed{38.3} \end{array}$$

TEEN NUMBERS



10 ones and 7 ones
is the same as 17.

$$10 + 7 = 17$$

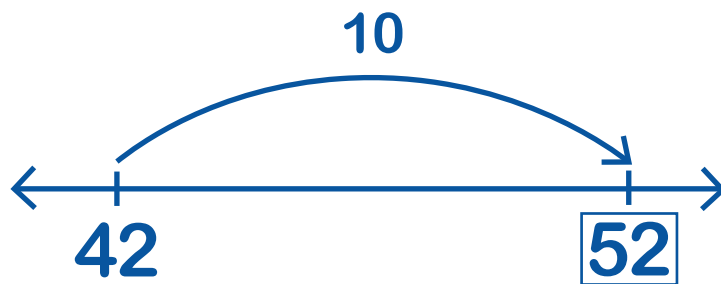


19 is the same as
10 ones and 9 ones.

$$19 = 10 + 9$$

ADD TEN

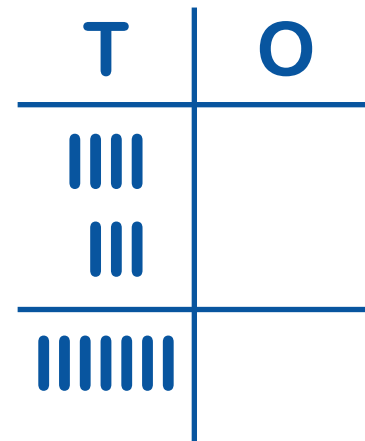
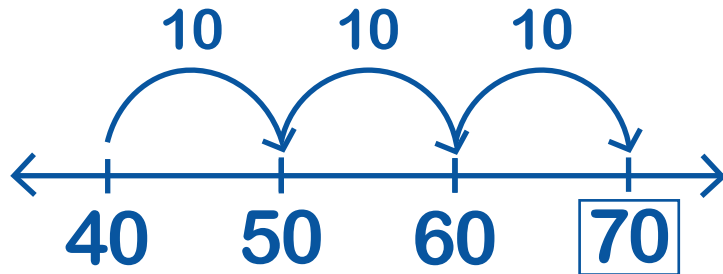
$$42 + 10$$



T	O
	■ ■
	■ ■

ADD TENS

$$40 + 30$$



4 tens + 3 tens
= 7 tens
= 70

PLACE VALUE

Decompose the addends and add by place value.

$$45 + 32$$

$$40 + 30 = 70$$

$$5 + 2 = 7$$

$$70 + 7 = \boxed{77}$$

PLACE VALUE

Decompose the addends and add by place value.

$$436 + 245$$

$$400 + 200 = 600$$

$$30 + 40 = 70$$

$$6 + 5 = 11$$

$$600 + 70 + 11 = \boxed{681}$$

PLACE VALUE

Decompose the addends and add by place value.

$$3\frac{3}{5} + 4\frac{2}{5}$$

$$3 + 4 = 7$$

$$\frac{3}{5} + \frac{2}{5} = \frac{5}{5}$$

$$7 + \frac{5}{5} = \boxed{8}$$

PLACE VALUE

Decompose the addends and add by place value.

$$3.63 + 2.13$$

$$3 + 2 = 5$$

$$0.6 + 0.1 = 0.7$$

$$0.03 + 0.06 = 0.09$$

$$5 + 0.7 + 0.09 = \boxed{5.79}$$

$$6\frac{3}{4} + 1\frac{7}{8}$$

$$6 + 1 = 7$$

$$\frac{3}{4} \left(\frac{6}{8}\right) + \frac{7}{8} = \frac{13}{8}$$

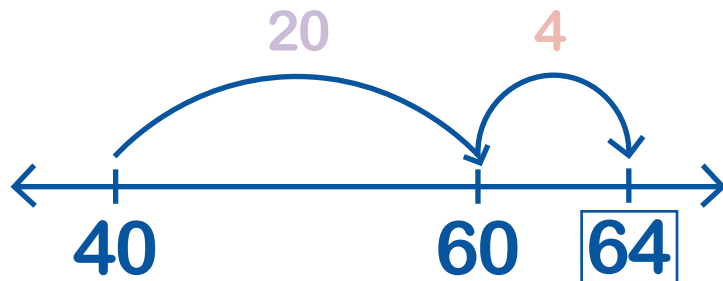
$$7 + \frac{13}{8} = 7\frac{13}{8} = \boxed{8\frac{5}{8}}$$

ADD UP IN CHUNKS

Begin with the larger addend and add the smaller addend in 'friendly' chunks.

$$40 + 24$$

20 4



$$40 + 20 = 60$$

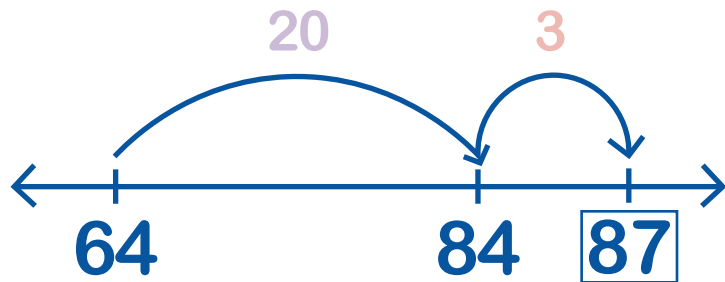
$$60 + 4 = 64$$

ADD UP IN CHUNKS

Begin with the larger addend and add the smaller addend in 'friendly' chunks.

$$64 + 23$$

20 3




$$64 + 20 = 84$$

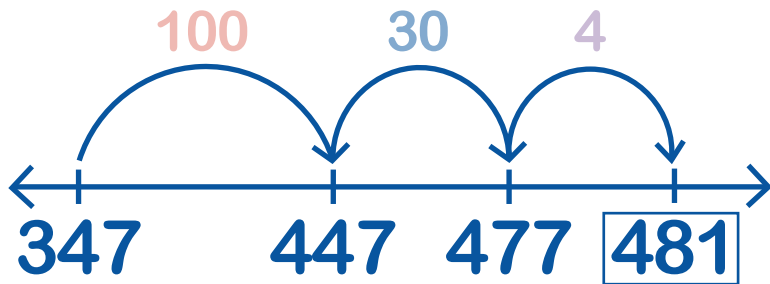
$$84 + 3 = 87$$

ADD UP IN CHUNKS

Begin with the larger addend and add the smaller addend in 'friendly' chunks.

$$134 + 347$$


A tree diagram showing the number 134 being broken down into three chunks: 100, 30, and 4.



$$347 + 100 = 447$$

$$447 + 30 = 477$$

$$477 + 4 = 481$$

ADD UP IN CHUNKS

Begin with the larger addend and add the smaller addend in 'friendly' chunks.

$$5\frac{4}{6} + 2\frac{1}{6}$$

$$5\frac{4}{6} + 2 = 7\frac{4}{6}$$

$$7\frac{4}{6} + \frac{1}{6} = \boxed{7\frac{5}{6}}$$

ADD UP IN CHUNKS

Begin with the larger addend and add the smaller addend in 'friendly' chunks.

$$12.25 + 30.43$$

$$30.43 + 12 = 42.43$$

$$42.43 + 0.2 = 42.63$$

$$42.63 + .05 = \boxed{42.68}$$

$$5\frac{4}{9} + 2\frac{1}{3}$$

$$5\frac{4}{9} + 2 = 7\frac{4}{9}$$

$$7\frac{4}{9} + \frac{1}{3} \left(\frac{3}{9}\right) = \boxed{7\frac{7}{9}}$$

COMPENSATION

Add to one addend to make a 'friendly' number. Compensate by subtracting the same amount from the other addend.

$$\begin{array}{r} 48 \\ + 2 \\ \hline 50 \end{array} + \begin{array}{r} 34 \\ - 2 \\ \hline 32 \end{array} = \boxed{82}$$

COMPENSATION

Add to one addend to make a 'friendly' number. Compensate by subtracting the same amount from the other addend.

$$\begin{array}{r} 297 \\ + 3 \\ \hline 300 \end{array} + \begin{array}{r} 115 \\ - 3 \\ \hline 112 \end{array} = \boxed{412}$$

COMPENSATION


Add to one addend to make a 'friendly' number. Compensate by subtracting the same amount from the other addend.

$$\begin{array}{r} 3,798 \\ + 202 \\ \hline 4,000 \end{array} + \begin{array}{r} 2,405 \\ - 202 \\ \hline 2,203 \end{array} = \boxed{6,203}$$

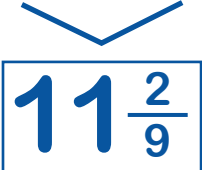
COMPENSATION

Add to one addend to make a 'friendly' number. Compensate by subtracting the same amount from the other addend.

$$\begin{array}{r} 3.76 + 2.89 \\ - .11 \quad + .11 \\ \hline 3.65 + 3 \\ \hline \end{array}$$


6.65

$$\begin{array}{r} 7\frac{2}{3} + 3\frac{5}{9} \\ + \frac{1}{3} \quad - \frac{1}{3} \left(\frac{3}{9}\right) \\ \hline 8 + 3\frac{2}{9} \\ \hline \end{array}$$


11 $\frac{2}{9}$