

# Mental Addition

Break numbers into parts to make adding easier:

$$30 + 28$$

$$30 + \overset{/}{20} + \overset{\backslash}{8} = \underline{\hspace{2cm}}$$

$$12 + 60$$

$$\overset{/}{2} + \overset{\backslash}{10} + 60 = \underline{\hspace{2cm}}$$

1. Break one of the numbers into its tens and ones. Then add using mental math.

a. $50 + 14$  $= \underline{50} + \underline{10} + 4 = 64$	b. $80 + 11$	c. $50 + 39$
d. $35 + 60$	e. $10 + 5 + 21$	f. $29 + 40 + 30$

2. Add the tens and the ones separately. Look at the example.

a. $36 + 22$ $= 30 + 20 + 6 + 2$ $=$	b. $72 + 18$ $= 70 + 10 + 2 + 8$ $=$	c. $54 + 37$
d. $24 + 55$	e. $36 + 36$	f. $42 + 68$

3. Play the **5-Card Draw to the Target** game. (See Games and Activities.)

4. Find the easiest order to add! You can break numbers into parts and add part-by-part.

a.  $20 + 40 + 2 + 7$   
 $= \underline{\hspace{2cm}}$

b.  $30 + 50 + 8 + 2$   
 $= \underline{\hspace{2cm}}$

c.  $40 + 60 + 4 + 3$   
 $= \underline{\hspace{2cm}}$

d.  $10 + 12 + 7 + 3$   
 $= \underline{\hspace{2cm}}$

e.  $52 + 4 + 30 + 3$   
 $= \underline{\hspace{2cm}}$

f.  $78 + 10 + 2 + 20$   
 $= \underline{\hspace{2cm}}$

If the number you add changes, the *sum* (answer) changes in the *same* way!

$$56 + 4 = 60$$

$$56 + \mathbf{5} = \mathbf{61}$$

1 more

$$17 + 100 = 117$$

$$17 + \mathbf{99} = \mathbf{116}$$

1 less

$$15 + 15 = 30$$

$$15 + \mathbf{17} = \mathbf{32}$$

2 more

5. Compare each pair of problems, and solve.

<b>a.</b>	<b>b.</b>	<b>c.</b>
$48 + 20 = \underline{\hspace{2cm}}$	$28 + 100 = \underline{\hspace{2cm}}$	$25 + 25 = \underline{\hspace{2cm}}$
$48 + 21 = \underline{\hspace{2cm}}$	$28 + 99 = \underline{\hspace{2cm}}$	$25 + 27 = \underline{\hspace{2cm}}$
<b>d.</b>	<b>e.</b>	<b>f.</b>
$200 + 36 = \underline{\hspace{2cm}}$	$36 + 40 = \underline{\hspace{2cm}}$	$46 + 50 = \underline{\hspace{2cm}}$
$199 + 36 = \underline{\hspace{2cm}}$	$36 + 39 = \underline{\hspace{2cm}}$	$46 + 47 = \underline{\hspace{2cm}}$

Now think of an easier problem to solve first.

<b>g.</b>	<b>h.</b>	<b>i.</b>
$98 + 14 = \underline{\hspace{2cm}}$	$62 + 29 = \underline{\hspace{2cm}}$	$53 + 38 = \underline{\hspace{2cm}}$

### Puzzle Corner

Solve the mystery numbers signified by the shapes!  
(Hint: you can guess and check.)

**a.**

$$\triangle + \triangle + 1 = 15$$

$$\triangle = \underline{\hspace{2cm}}$$

**b.**

$$\square + \hexagon = 11$$

$$\square - \hexagon = 5$$

$$\hexagon = \underline{\hspace{2cm}}$$

$$\square = \underline{\hspace{2cm}}$$

**c.**

$$\text{rectangle} + \text{circle} = 17$$

$$\text{rectangle} + \text{rectangle} = 14$$

$$\text{circle} = \underline{\hspace{2cm}}$$

$$\text{rectangle} = \underline{\hspace{2cm}}$$