

## #1

## Jigsaw Puzzle Fun

## Adding without Carrying


Someone has given you a 500-piece jigsaw puzzle as a birthday present. During the next four days you put together 79 pieces, 48 pieces, 67 pieces, and 58 pieces. You'd like to figure out the total number of pieces you have put together. To solve this problem, you would add  $79 + 48 + 67 + 58$ .


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*Here's the Trick*

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You can add these numbers *without* carrying by adding each column and then adding the totals. First add the ones column, and write down the total. Then add the tens column, and write down that total one place to the left. Finally, add the column totals, and you've got the answer. Let's try this "no-carry" method on our jigsaw puzzle example.

	<b>Problem:</b>	79
	$79 + 48 + 67 + 58$	48
		67
		<u>+ 58</u>
<b>Step 1.</b>	Add the ones column <span style="font-size: 2em;">→</span>	32
<b>Step 2.</b>	Add the tens column <span style="font-size: 2em;">→</span>	<u>22</u>
	<b>Answer:</b>	252 pieces

	Let's try another one:	73
	$73 + 18 + 54 + 36$	18
		54
		<u>+ 36</u>
<b>Step 1.</b>	Add the ones column <span style="font-size: 2em;">→</span>	21
<b>Step 2.</b>	Add the tens column <span style="font-size: 2em;">→</span>	<u>16</u>
	<b>Answer:</b>	181



**FOOD FOR THOUGHT** This trick will also work when adding numbers in the hundreds. Just write the total of the hundreds column another place to the left, and then add! Now and then you will have to carry when using this trick, but not often.

*Now It's Your Turn*

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|-------------|-------------|-------------|-------------|-------------|-------------|
| 1. 74       | 2. 32       | 3. 44       | 4. 15       | 5. 78       | 6. 86       |
| 22          | 59          | 14          | 47          | 91          | 44          |
| 36          | 47          | 83          | 63          | 25          | 58          |
| <u>+ 55</u> | <u>+ 60</u> | <u>+ 92</u> | <u>+ 52</u> | <u>+ 48</u> | <u>+ 92</u> |
| 17          |             |             |             |             |             |
| <u>17</u>   |             |             |             |             |             |
| 187         |             |             |             |             |             |

(See answers on page 137.)

## #2

# She Sells Seashells by the Seashore

## Adding by Altering

One of your favorite activities at the beach is collecting seashells. This morning you collected 29 seashells, and this afternoon you collected 44. How many seashells did you collect altogether? To solve this problem, you would add  $29 + 44$ .

### *Here's the Trick*

Whenever you're adding a number that ends in 9, first *add 1* to the number in your head. So a number like 29 would become 30. Then *subtract 1* from the other number. So a number like 44 would become 43. Finally, add the two "new" numbers, and you've got the answer. Let's use this trick to see how many seashells you collected.


 **Problem:**  $29 + 44$

**Step 1.** Add 1 to the 29  $\longrightarrow$   $29 + 1 = 30$

**Step 2.** Subtract 1 from the 44  $\longrightarrow$   $44 - 1 = 43$

**Step 3.** Add the 43 to the 30  $\longrightarrow$   $30 + 43 = 73$

**Answer:** 73 seashells

 Let's try one more example:  $59 + 35$

**Step 1.** Add 1 to the 59  $\longrightarrow$   $59 + 1 = 60$

**Step 2.** Subtract 1 from the 35  $\longrightarrow$   $35 - 1 = 34$

**Step 3.** Add the 34 to the 60  $\longrightarrow$   $60 + 34 = 94$

**Answer:** 94



**FOOD FOR THOUGHT** Multiples of 10 (like 20, 30, and so on) are always easier to add than nonmultiples. This trick begins by changing the number ending in 9 to a multiple of 10. When you're adding a number that ends in 8, add 2 to change it to a multiple of 10. Then subtract 2 from the other number. Finally, add the two new numbers, and you've got the answer. So  $48 + 26$  becomes  $(48 + 2) + (26 - 2)$ , or  $50 + 24$ , which equals 74.

### *Now It's Your Turn*

1.  $49 + 25 = 74$
2.  $56 + 39 =$
3.  $72 + 19 =$

4.  $89 + 44 =$
5.  $33 + 69 =$
6.  $59 + 97 =$

(See answers on page 137.)