Mental Math

Multiplying by 11

- 32 x 11 can solve this in your head?

Multiplying by 11

- 32 x 11 simply add 3 and 2 which = 5. Now put the 5 in between the 3 and the 2. And you get 352.

Multiplying by 11

- 85 x 11 what if the number adds more than 9. 8 + 5 = 13. As before the 3 goes in between the 8 and the 5. But the 1 needs to be added to the 8. The answer you get is 935.

Let's Practices show your answer calculate in your head.

1.) 97
x11

2.) 45
x11

3.) 99
x11

4.) 88
x11

Adding Left to Right

- The easiest addition questions are those that do not have any carrying.

- To solve 47 + 32, first add 30 and 47, then add 2. After adding 30,
- you have the *simpler* problem 77 + 2, which equals 79. We
- illustrate this as follows:

$$\begin{array}{r} 47 \\ +32 \\ \hline \end{array}$$

Let's Practices show your answer calculate in your head.

1.) 47
+43

2.) 58
+22

3.) 33
+64

4.) 63
+25

Now let's try a calculation that requires you to carry a number:

- Adding from left to right, you can simplify the problem by adding 67 + 20 = 87; then 87 + 8 = 95.

67 + 28 = 87 + 8 = 95

(first add 20) (then add 8)

$$\begin{array}{r} 67 \\ +28 \\ \hline \end{array}$$

Let's Practices show your answer calculate in your head.

1.) 84
+57

2.) 68
+45

3.) 97
+16

4.) 63
+39

References

- Credit goes to Arthur Benjamin and Michael Shermer there book Secrets of Mental Math