

Use the **box method** to solve the problem below:

1) 72×83

	70	2
80	5600	160
3	210	6

5600
160
210
6

+

5976

$$72 \times 83 = \underline{5976}$$

Use the **distributive property** to solve the problems below:


2) $6(3 + 9)$


$$\begin{array}{r}
 \begin{array}{c} \text{blue} \quad \text{orange} \\ \curvearrowright \quad \curvearrowright \\ 6(3 + 9) \end{array} \\
 \hline
 18 + 54 \\
 \hline
 = 72
 \end{array}$$

3) $8(8 + 7)$

$$\begin{array}{r}
 \begin{array}{c} \text{blue} \quad \text{orange} \\ \curvearrowright \quad \curvearrowright \\ 8(8 + 7) \end{array} \\
 \hline
 64 + 56 \\
 \hline
 = 120
 \end{array}$$

Solve the problems by estimating:

4) $103 \times 64 =$  $\underline{100} \times \underline{64} =$ 6,400

5) $86 \times 12 =$  $\underline{90} \times \underline{10} =$ 900

100 x 60 = 6,000 is acceptable

Circle the answers for the problems below:

6) $7^2 =$ a) 49 b) 14 c) 0 d) 7

7) $4^2 =$ a) 4 b) 14 c) 16 d) 8

8) $9^1 =$ a) 1 b) 18 c) 0 d) 9

9) $8^0 =$ a) 1 b) 0 c) 8 d) 16

10) $1^3 =$ a) 1 b) 0 c) 3 d) 13

Write the **standard** number by un-expanding the numbers:

11) $70,000 + 300 + 10 + 9 =$ 70,319

12) $20,000 + 1,000 + 50 + 3 =$ 21,053

Expand the number below:

13) $60,230,050$ _____

$60,000,000 + 200,000 + 30,000 + 50$

Score: _____ / 13 = _____ %