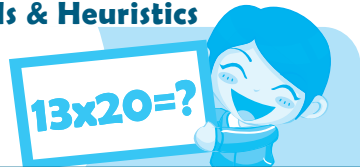


Mental Calculation



Multiplication — Identical First Digits for 2-Digit Numbers

Find the value of 24×27 .

STRATEGY

Step 1: To find the last digit of the answer,

$$4 \times 7 = 2\textcircled{8} \quad \begin{array}{l} \text{[multiply the last digits of the two numbers]} \\ \text{[carry 2 to the next step]} \end{array}$$

Step 2: To find the second last digit of the answer,

$$(2 \times 4) + (2 \times 7) = 22 \quad \begin{array}{l} \text{[multiply the last digit of each number by the} \\ \text{common digit, 2, and add the product]} \\ 22 + 2 = 2\textcircled{4} \quad \begin{array}{l} \text{[add 2 from step 1]} \\ \text{[carry 2 to the next step]} \end{array} \end{array}$$

Step 3: To find the first few digits of the answer,

$$\begin{array}{l} 2 \times 2 = 4 \quad \text{[multiply the common digit]} \\ 4 + 2 = \textcircled{6} \quad \text{[add 2 from step 2]} \end{array}$$

$$24 \times 27 = \mathbf{648}$$

Do these multiplication mentally.

1 $13 \times 19 =$

6 $42 \times 45 =$

2 $96 \times 95 =$

7 $57 \times 58 =$

3 $25 \times 26 =$

8 $66 \times 67 =$

4 $54 \times 52 =$

9 $78 \times 74 =$

5 $31 \times 32 =$

10 $89 \times 83 =$

Answers: 1 247 2 9120 3 650 4 2808 5 992 6 1890 7 3306 8 4422 9 5772 10 7387