Place value and powers of ten

6 questions | 12 marks

Equivalent correct methods earn the corresponding marks.

1. What is the value of the 6 in 2,604,815? [2 marks]

The 6 is in the hundred-thousands position.

$6 \times 100{,}000 = 600{,}000$.

Answer: 600,000

2. Write 7,020,409 in expanded form. [2 marks]

Read each non-zero digit with its position.

There are 7 millions, 2 ten-thousands, 4 hundreds and 9 ones.

Answer: $7{,}000{,}000 + 20{,}000 + 400 + 9$

3. Calculate 48×1000. [2 marks]

Multiplication by 1,000 scales each digit by 1,000.

$48 \times 1000 = 48{,}000$.

Answer: 48,000

4. Calculate $930{,}000 \div 100$. [2 marks]

Group the number into hundreds.

$930{,}000 \div 100 = 9300$.

Answer: 9,300

5. Write the number with 4 hundred-thousands, 7 thousands, 2 tens and 6 ones. [2 marks]

Add $400{,}000 + 7000 + 20 + 6$.

Keep zeros in the ten-thousands and hundreds positions.

Answer: 407,026

6. Use each digit 0, 2, 4, 6, 7 and 9 once to make the greatest six-digit number. [2 marks]

The highest place must receive the greatest remaining digit.

Arrange the digits from largest to smallest: 9, 7, 6, 4, 2, 0.

Answer: 976,420