Partitioning whole numbers

6 questions | 8 marks

Equivalent correct methods earn the corresponding marks.

1. Write 46,825 in standard expanded form. [1 mark]

Each part is the value of one non-zero digit.

Answer: $40,000 + 6,000 + 800 + 20 + 5$

2. What number is $6 \text{ thousands} + 12 \text{ hundreds} + 3 \text{ tens} + 4 \text{ ones}$? [1 mark]

$6,000 + 1,200 + 30 + 4 = 7,234$.

Answer: 7,234

3. Write 5,307 using hundreds, tens and ones. [1 mark]

5,300 is 53 hundreds; the remaining part is 7.

Answer: $53 \text{ hundreds} + 0 \text{ tens} + 7 \text{ ones}$

4. Complete: $7,615 = 75 \text{ hundreds} + ___ \text{ tens} + 5 \text{ ones}$. [1 mark]

$7,615 - 7,500 - 5 = 110$, which is 11 tens.

Answer: 11

5. Sam writes $4,008 = 400 + 8$. Explain and correct the error. [2 marks]

$400 + 8$ is 408, not 4,008.

Answer: The 4 means 4,000, so $4,008 = 4,000 + 8$.

6. Give two different partitions of 9,020. [2 marks]

Both sums equal 9,020. Other equivalent partitions are valid.

Answer: For example, $9,000 + 20$ and $8,000 + 1,020$.