Worked answers | Integers

Mixed addition/subtraction problems

6 questions | 13 marks

Equivalent correct methods earn the corresponding marks.

1. Evaluate $-3+9-8$. [2 marks]

$-3+9=6$.

$6-8=-2$.

Answer: -2

2. Evaluate $7-12+(-4)$. [2 marks]

$7-12=-5$.

$-5+(-4)=-9$.

Answer: -9

3. Evaluate $-10-(-6)+5$. [2 marks]

Subtracting -6 gives $-10+6=-4$.

Then $-4+5=1$.

Answer: 1

4. An account starts with 18 dollars. A payment of 25 dollars is made, then 4 dollars is refunded. Find the balance. [2 marks]

The payment gives $18 - 25 = -7$.

The refund adds 4: $-7 + 4 = -3$.

Answer: -3 dollars

5. Find the integer that completes $-5 + \square = 3$. [2 marks]

The move from -5 to 3 is eight units right.

Check $-5 + 8 = 3$.

Answer: 8

6. Are $-4 - (-7)$ and $-4 + 7$ equal? Explain. [3 marks]

Subtracting -7 adds its opposite $+7$.

Both expressions equal $-4 + 7 = 3$.

Answer: Yes; both equal 3.