Exercise 1B

Solution 01

Answer :

(i) $16 \times 9 = 144$

(ii) $18 \times (-6) = -(18 \times 6) = -108$

(iii) $36 \times (-11) = -(36 \times 11) = -396$

(iv) $(-28) \times 14 = -(28 \times 14) = -392$

(v) $(-53) \times 18 = -(53 \times 18) = -954$

(vi) $(-35) \times 0 = 0$

(vii) $0 \times (-23) = 0$

(viii) $(-16) \times (-12) = 192$

(ix) $(-105) \times (-8) = 840$

(x) $(-36) \times (-50) = 1800$

(xi) $(-28) \times (-1) = 28$

(xii) $25 \times (-11) = -(25 \times 11) = -275$

Solution 02

Answer :

(i) $3 \times 4 \times (-5) = (12) \times (-5) = -60$

(ii) $2 \times (-5) \times (-6) = (-10) \times (-6) = 60$

(iii) $(-5) \times (-8) \times (-3) = (-5) \times (24) = -120$

(iv) $(-6) \times 6 \times (-10) = 6 \times (60) = 360$

(v) $7 \times (-8) \times 3 = 21 \times (-8) = -168$

(vi) $(-7) \times (-3) \times 4 = 21 \times 4 = 84$

Solution 03

(i) Since the number of negative integers in the product is even, the product will be positive.
(4) × (5) × (8) × (10) = 1600

(ii) Since the number of negative integers in the product is odd, the product will be negative.
−(6) × (5) × (7) × (2) × (3) = −1260

(iii) Since the number of negative integers in the product is even, the product will be positive.
(60) × (10) × (5) × (1) = 3000

(iv) Since the number of negative integers in the product is odd, the product will be negative.
−(30) × (20) × (5) = −3000

(v) Since the number of negative integers in the product is even, the product will be positive.
$(-3)^6$ = 729

(vi) Since the number of negative integers in the product is odd, the product will be negative.
$(-5)^5$ = −3125

(vii) Since the number of negative integers in the product is even, the product will be positive.
$(-1)^{200}$ = 1

(viii) Since the number of negative integers in the product is odd, the product will be negative.
$(-1)^{171}$ = −1

Solution 04

Answer :

Multiplying 90 negative integers will yield a positive sign as the number of integers is even.
Multiplying any two or more positive integers always gives a positive integer.
The product of both(the above two cases) the positive and negative integers is also positive.
Therefore, the final product will have a positive sign.

Solution 05

Multiplying 103 negative integers will yield a negative integer, whereas 65 positive integers will give a positive integer.
The product of a negative integer and a positive integer is a negative integer.

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