



Exercise 1B

Solution 06

Answer :

$$\begin{aligned} \text{(i)} \quad & (-8) \times (9 + 7) \quad [\text{using the distributive law}] \\ & = (-8) \times 16 = -128 \end{aligned}$$

$$\begin{aligned} \text{(ii)} \quad & 9 \times (-13 + (-7)) \quad [\text{using the distributive law}] \\ & = 9 \times (-20) = -180 \end{aligned}$$

$$\begin{aligned} \text{(iii)} \quad & 20 \times (-16 + 14) \quad [\text{using the distributive law}] \\ & = 20 \times (-2) = -40 \end{aligned}$$

$$\begin{aligned} \text{(iv)} \quad & (-16) \times (-15 + (-5)) \quad [\text{using the distributive law}] \\ & = (-16) \times (-20) = 320 \end{aligned}$$

$$\begin{aligned} \text{(v)} \quad & (-11) \times (-15 + (-25)) \quad [\text{using the distributive law}] \\ & = (-11) \times (-40) \\ & = 440 \end{aligned}$$

$$\begin{aligned} \text{(vi)} \quad & (-12) \times (10 + 5) \quad [\text{using the distributive law}] \\ & = (-12) \times 15 = -180 \end{aligned}$$

$$\begin{aligned} \text{(vii)} \quad & (-16 + (-4)) \times (-8) \quad [\text{using the distributive law}] \\ & = (-20) \times (-8) = 160 \end{aligned}$$

$$\begin{aligned} \text{(viii)} \quad & (-26) \times (72 + 28) \quad [\text{using the distributive law}] \\ & = (-26) \times 100 = -2600 \end{aligned}$$

Solution 07

Answer :

$$(i) (-6) \times (x) = 6$$

$$x = 6 \div -6 = -1$$

Thus, $x = (-1)$

- (ii) 1 [\because Multiplicative identity]
- (iii) (-8) [\because Commutative law]
- (iv) 7 [\because Commutative law]
- (v) (-5) [\because Associative law]
- (vi) 0 [\because Property of zero]

Solution 08

Answer :

We have 5 marks for correct answer and (-2) marks for an incorrect answer.

Now, we have the following:

$$(i) \text{ Ravi's score} = 4 \times 5 + 6 \times (-2)$$

$$= 20 + (-12) = 8$$

$$(ii) \text{ Reenu's score} = 5 \times 5 + 5 \times (-2)$$

$$= 25 - 10 = 15$$

$$(iii) \text{ Heena's score} = 2 \times 5 + 5 \times (-2)$$

$$= 10 - 10 = 0$$

Solution 09

Answer :

- (i) True.
- (ii) False. Since the number of negative signs is even, the product will be a positive integer.
- (iii) True. The number of negative signs is odd.
- (iv) False. $a \times (-1) = -a$, which is not the multiplicative inverse of a .
- (v) True. $a \times b = b \times a$
- (vi) True. $(a \times b) \times c = a \times (b \times c)$
- (vii) False. Every non-zero integer a has a multiplicative inverse $1/a$, which is not an integer.

***** END *****