Exercise 1B

Solution 06

Answer :

(i) $(-8) \times (9 + 7)$ [using the distributive law]
$= (-8) \times 16 = -128$

(ii) $9 \times (-13 + (-7))$ [using the distributive law]
$= 9 \times (-20) = -180$

(iii) $20 \times (-16 + 14)$ [using the distributive law]
$= 20 \times (-2) = -40$

(iv) $(-16) \times (-15 + (-5))$ [using the distributive law]
$= (-16) \times (-20) = 320$

(v) $(-11) \times (-15 + (-25))$ [using the distributive law]
$= (-11) \times (-40)$
$= 440$

(vi) $(-12) \times (10 + 5)$ [using the distributive law]
$= (-12) \times 15 = -180$

(vii) $(-16 + (-4)) \times (-8)$ [using the distributive law]
$= (-20) \times (-8) = 160$

(viii) $(-26) \times (72 + 28)$ [using the distributive law]
$= (-26) \times 100 = -2600$

Solution 07

Answer :

(i) $(-6) \times (x) = 6$
$x = 6\text{-}6 = -66 = -1$

Thus, $x = (-1)$

(ii) 1 [∵ Multiplicative identity]
(iii) (−8) [∵ Commutative law]
(iv) 7 [∵ Commutative law]
(v) (−5) [∵ Associative law]
(vi) 0 [∵ 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) Ravi's score $= 4 \times 5 + 6 \times (-2)$
$= 20 + (-12) = 8$

(ii) Reenu's score $= 5 \times 5 + 5 \times (-2)$
$= 25 - 10 = 15$

(iii) 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 1a, which is not an integer.

********** END **********