Exercise 1D

Solution 12

Answer :

(b) 0

Dividing zero by any integer gives zero as the result.

Solution 13

Answer :

(c) not defined

Dividing any integer by zero is not defined.

Solution 14

Answer :

(b) $-11 < -8$

Negative integers decrease with increasing magnitudes.

Solution 15

Answer :

(b) 9

Let the other integer be a. Then, we have:

$-3 + a = 6$

$\therefore a = 6 - (-3) = 9$

Solution 16

Answer :

(a) −10

Let the other integer be a. Then, we have:

$6 + a = -4$

$\therefore a = -4 - 6 = -10$

Hence, the other integer is −10.

Solution 17

Answer :

(a) 22

Let the other integer be a. Then, we have:

$-8 + a = 14$

$\therefore a = 14 + 8 = 22$

Hence, the other integer is 22.

Solution 18

Answer :

(c) 6

The additive inverse of any integer a is $-a$.

Thus, the additive inverse of −6 is 6.

Solution 19

Answer :

(b) −150

We have $(-15) \times 8 + (-15) \times 2$

$= (-15) \times (8 + 2)$ [Associative property]

$= -150$

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