CHAPTER 1

INTEGERS

QUESTION BANK

Question 1.

(-11) × 7 is not equal to
(a) 11 × (-7)
(b) -(11 × 7)
(c) (- 11) × (- 7)
(d) 7 × (-11)

Question 2.

(- 10) × (- 5) + (- 7) is equal to
(a) -57
(b) 57
(c) -43
(d) 43

Question 3.

Which of the following is the multiplicative identity for an integer 0?
(a) a
(b) 1
(c) 0
(d) -1

Question 4.

[(- 8) × (- 3)] × (- 4)] is not equal to
(a) (- 8) × [(- 3) × (- 4)]
(b) [(- 8) × (- 4)] × (- 3)
(c) [(- 3) × (- 8)] × (- 4)
(d) (- 8) × (- 3) – (- 8) × (- 4)

Question 5.
(- 25) × [6 + 4] is not same as
(a) (-25) × 10
(b) (-25) × 6 + (- 25) × 4
(c) -25 × 6 × 4
(d) – 250

Question 6.
– 35 × 107 is not same as
(a) – 35 × (100 + 7)
(b) (- 35) × 7 + (- 35) × 100
(c) – 35 × 7 + 100
(d) (-30 -5) × 107

Question 7.
(- 43) × (- 99) + 43 is equal to
(a) 4300
(b) – 4300
(c) 425
(d) -4214

Question 8.
(- 16) ÷ 4 is not same as
(a) (-4) ÷ 16
(b) -(16 ÷ 4)
(c) 16 ÷ (-4)
(d) – 4

Question 9.
Which of the following does not represent an integer?
(a) 0 ÷ (- 7)
(b) 20 ÷ (- 4)
(c) (-9) ÷ 3
(d) (-12) ÷ 5

Question 10.
Which of the following is different from the others?
(a) 20 + (-25)
(b) (-37) – (-32)
(c) (-5) × (— 1)
(d) 45 ÷ (- 9)
Question 11.
If a and b are two integers, then which of the following may not be an integer?
(a) a + b
(b) a – b
(c) a × b
(d) a ÷ b

Question 12.
For a non-zero integer a, which of the following is not defined?
(a) a ÷ 0
(b) 0 ÷ a
(c) a ÷1
(d) 1 ÷ a

Directions: Encircle the odd one of the following: (Questions 13 to 17)
Question 13.
(a) (- 9) × 5 × 6 × (- 3)
(b) 9 × (-5) × 6 × (-3)
(c) (- 9) × (- 5) × (- 6) × 3
(d) 9 × (- 5) × (- 6) × 3

Question 14.
(a) (-100) ÷ 5
(b) (-81) ÷ 9
(c) (- 75) ÷ 5
(d) (-32) ÷ 9

Question 15.
(a) (- 1) × (- l)
(b) (- 1) × (- l) × (- 1)

(c) (-1) × (-1) × (-1) × (-1)
(d) (-1) × (-1) × (-1) × (-1) × (-1) × (-1)

Question 16.
(a) (-3, 3)
(b) (-5, 5)
(c) (-6, 1)
(d) (-8, 8)

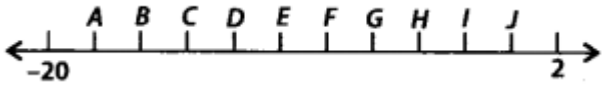
Question 17.
(a) (-1, -2)
(b) (-5, 2)
(c) (- 4, 1)
(d) (- 9, 7)

Directions: In questions 18 to 54, fill in the blanks to make the statements true.

Question 18.
_____ ÷ (- 10) = 0

Question 19.
(- 157) × (— 19) + 157 =_____ .

Question 20.
On the following number line, (- 4) × 3 is represented by the point_____ .



Question 21.
(- 8) + (- 8) + (- 8) =_____ × (- 8)

Question 22.
11 × (- 5) = – (_____ x____) =_____

Question 23.
(- 9) × 20 =_____

Question 24.
(- 23) × (42) = (- 42) ×_____

Question 25.
While multiplying a positive integer and a negative integer, we multiply them as ___ numbers and put a ___ sign before the product.

Question 26.
If we multiply___ number of negative integers, then the resulting integer is positive.

Question 27.
If we multiply six negative integers and six positive integers, then the resulting integer is___ .

Question 28.
If we multiply five positive integers and one negative integer, then the resulting integer is ___ .

Question 29.
_____ is the multiplicative identity for integers.

Question 30.
We get additive inverse of an integer a, when we multiply it by ___ .

Question 31.
(- 25) × (- 2) =_____.

Question 32.
(- 5) × (- 6) × (- 7) =_____.

Question 33.
3 × (- 1) × (- 15) =_____.

Question 34.
[12 × (- 7)] × 5 =_____ × [(- 7) × ____]

Question 35.
23 × (- 99) = ____ × (- 100 + ____) = 23 × ____ + 23 × ____

Question 36.
_____ × (- 1) = – 35

Question 37.
____ × (- 1) = 47

Question 38.
88 × ____ = – 88

Question 39.
____ × (- 93) = 93

Question 40.
(- 40) × ___ = 80

Question 41.
____ × (-23) = – 920

Question 42.
When we divide a negative integer by a positive integer, we divide them as whole numbers and put a ____ sign before quotient.

Question 43.
When (-16) is divided by ____ the quotient is 4.

Question 44.
Division is the inverse operation of ____ .

Question 45.
65 ÷ (- 13) =_____.

Question 46.
(-100) ÷ (-10) =_____.

Question 47.
(-225) ÷ 5 = _____.

Question 48.
_____ ÷ (-1) = (- 83)

Question 49.
____ ÷ (-1) = 75

Question 50.
51 ÷ ____ =(-51)

Question 51.
113 ÷ ____ = (- 1)

Question 52.
-95 ÷ (-1) = 95

Question 53.
(-69) ÷ 69 =_____.

Question 54.
(-28) ÷ (-28) = _____

Question 55.

Evaluate:

(i) 427 × 8 + 2 × 427

(ii) 394 × 12 + 394 × (-2)

(iii) 558 × 27 + 3 × 558

Question56.

Evaluate:

(i) 673 × 9 + 673

(ii) 1925 × 101 – 1925

Question 57.

Verify:

(i) 37 × {8 + (-3)} = 37 × 8 + 37 × (-3)

(ii) (-82) × {(- 4) + 19} = (-82) × (- 4) + (-82) × 19

(iii) {7 – (-7)} × 7 = 7 × 7 – (-7) × 7

(iv) {(-15) – 8} × -6 = (-15) × (-6) – 8 × (-6)

= (-82) × (-4 + 19)

Question 58.

Evaluate:

(i) 15 × 8

(ii) 15 × (-8)

(iii) (-15) × 8

(iv) (-15) × -8

Question 59.

Evaluate:

(i) 4 × 6 × 8

(ii) 4 × 6 × (-8)

(iii) 4 × (-6) × 8

(iv) (-4) × 6 × 8

(v) 4 × (-6) × (-8)

(vi) (-4) × (-6) × 8

(vii) (-4) × 6 × (-8)

(viii) (-4) × (-6) × (-8)

Question 60.

Evaluate:

(i) 2 × 4 × 6 × 8

(ii) 2 × (-4) × 6 × 8

(iii) (-2) × 4 × (-6) × 8

(iv) (-2) × (-4) × 6 × (-8)

(v) (-2) × (-4) × (-6) × (-8)

Question 61.

Determine the integer whose product with '-1' is:

(i) -47

(ii) 63

(iii) -1

(iv) 0

Question 62.

Eighteen integers are multiplied together. What will be the sign of their product, if:

(i) 15 of them are negative and 3 are positive?

(ii) 12 of them are negative and 6 are positive?

(iii) 9 of them are positive and the remaining are negative?

(iv) all are negative?

Question 63.

Find which is greater?

(i) $(8 + 10) \times 15$ or $8 + 10 \times 15$

(ii) $12 \times (6 – 8)$ or $12 \times 6 – 8$

(iii) $\{(-3) – 4\} \times (-5)$ or $(-3) – 4 \times (-5)$

Question 64.

State, true or false:

(i) product of two different integers can be zero.

(ii) product of 120 negative integers and 121 positive integers is negative.

(iii) $a \times (b + c) = a \times b + c$

(iv) $(b – c) \times a = b – c \times a$.

Question 65.

Divide:

(i) 117 by 9

(ii) (-117) by 9

(iii) 117 by (-9)

(iv) (-117) by (-9)

(v) 225 by (-15)

(vi) $(-552) \div 24$

(vii) (-798) by (-21)

(viii) $(-910) \div 26$

Question 66.

Evaluate:

(i) $(-234) \div 13$

(ii) 234 ÷ (-13)

(iii) (-234) ÷ (-13)

(iv) 374 ÷ (-17)

(v) (-374) ÷ 17

(vi) (-374) ÷ (-17)

(vii) (-728) ÷ 14

(viii) 272 ÷ (-17)

Question 67.

Find the quotient in each of the following divisions:

(i) 299 ÷ 23

(ii) 299 ÷ (-23)

(iii) (-384) ÷ 16

(iv) (-572) ÷ (-22)

(v) 408 ÷ (-17)

Question 68.

Divide:

(i) 204 by 17

(ii) 152 by – 19

(iii) 0 by 35

(iv) 0 by (-82)

(v) 5490 by 10

(vi) 762800 by 100

Question 69.

State, true or false:

(i) $0 \div 32 = 0$

(ii) $0 \div (-9) = 0$

(iii) $(-37) \div 0 = 0$

(iv) $0 \div 0 = 0$

Question 70.

Evaluate:

(i) $42 \div 7 + 4$

(ii) $12 + 18 \div 3$

(iii) $19 – 20 \div 4$

(iv) $16 – 5 \times 3 + 4$

(v) $6 – 8 – (-6) \div 2$

(vi) $13 – 12 \div 4 \times 2$

(vii) $16 + 8 \div 4 – 2 \times 3$

(viii) $16 \div 8 + 4 – 2 \times 3$

(ix) $16 – 8 + 4 \div 2 \times 3$

(x) $(-4) + (-12) \div (-6)$

(xi) $(-18) + 6 \div 3 + 5$

(xii) $(-20) \times (-1) + 14 \div 7$

Question 71.Evaluate:

$18 – (20 – 15 \div 3)$

Question 72.

$– 15 + 24 \div (15 – 13)$

Question 74.

46 – [26 – {14 – (15 – 4 ÷ 2 × 2)}]

Question 75.

45 – [38 – {60 ÷ 3 – (6 – 9 ÷ 3) ÷ 3}]

Question 76.

88 – {5 – (-48) ÷ (-16)}

Question 77.

The sum of two integers is – 15. If one of them is 9, find the other.

Question 78.

The difference between integers x and – 6 is – 5. Find the values of x.

Question 79.

The sum of two integers is 28. If one integer is – 45, find the other.

Question 80.

The sum of two integers is – 56. If one integer is – 42, find the other.

Question 81.

The difference between an integer x and (-9) is 6. Find all possible values of x.

Question 82.

Evaluate:

(i) (-1) × (-1) × (-1) × …… 60 times.

(ii) (-1) × (-1) × (-1) × (-1) × ……. 75 times.

Question 83.

Evaluate:

(i) (-2) × (-3) × (-4) × (-5) × (-6)

(ii) (-3) × (-6) × (-9) × (-12)

(iii) (-11) × (-15) × (-11) × (-25)

(iv) $10 \times (-12) + 5 \times (-12)$

Question 84.

(i) If $x \times (-1) = -36$, is x positive or negative?

(ii) If $x \times (-1) = 36$, is x positive or negative?

Question 85.

Write all the integers between – 15 and 15, which are divisible by 2 and 3.10.
Write all the integers between – 5 and 5, which are divisible by 2 or 3.

Question 86. Evaluate:

(i) $(-20) + (-8) \div (-2) \times 3$

(ii) $(-5) - (-48) \div (-16) + (-2) \times 6$

(iii) $16 + 8 \div 4 - 2 \times 3$

(iv) $16 \div 8 \times 4 - 2 \times 3$

(v) $27 - [5 + \{28 - (29 - 7)\}]$

(vi) $-8 - \{-6 (9 - 11) + 18 \div -3\}$

Question 87.

Add the product of (-13) and (-17) to the quotient of (-187) and 11.

Question 88.

The product of two integers is – 180. If one of them is 12, find the other.

Question 89.

(i) A number changes from – 20 to 30. What is the increase or decrease in the number?

(ii) A number changes from 40 to – 30. What is the increase or decrease in the number?