KINETICS
We Nurture The Future
IIT-JEE | Medical | Foundations

Integers

Question 1.
$-67 \times (-1) = ?$
(a) -1
(b) -67
(c) 67
(d) 1

Answer: (c) 67

Question 2.
Find 4 x (- 8)
(a) – 32
(b) 32
(c) None of these

Answer: (a) – 32
Product of 2 numbers of opposite signs is negative.

Question 3.
With respect to which of the following operations is closure property satisfied by the set of integers?
(a) +,×
(b) +,÷,×
(c) +,×,−
(d) +,−,÷

Answer: (c) +,×,−

Question 4.
On a number line, when we subtract a positive integer, we
(a) move to the right

(b) move to the left
(c) do not move at all
(d) none of these

Answer: (b) move to the left

Question 5.
$10 \times (-3) = ?$
(a) 7
(b) 30
(c) -30
(d) None of these

Answer: (c) -30

Question 6.
What is the absolute value of |-239|?
(a) 0
(b) 239
(c) -239
(d) 1

Answer: (b) 239

Question 7.
Additive inverse of 10 is :
(a) 0
(b) 10
(c) -10
(d) None of these

Answer: (c) -10
If a is an integer then (- a) is its additive inverse.

Question 8.
What will be the sign of the product if we multiply together 8 negative integers ?
(a) Negative
(b) Positive
(c) None of these

Answer: (b) Positive
Since 8 is even so the product of 8 negative integers is positive.

Question 9.
$2 \times 4 = ?$
(a) 8
(b) -8
(c) 3
(d) 6

Answer: (a) 8

Question 10.
Find 0 x 7
(a) 7
(b) 0
(c) None of these

Answer: (b) 0
Zero multiplied by any integer is zero.

Question 11.
$6 \times (-15 + 10) =$ _____
(a) 30
(b) -21
(c) -30
(d) 21

Answer: (c) -30

Question 12.
If a, b, c are 3 integers then, a + (b + c)=
(a) a + b + c
(b) (a + b) + c
(c) (a + c) + b
(d) None of these

Answer: (b) (a + b) + c
The addition of integer is associative.

Question 13.
Where are the negative numbers located on a horizontal number line?
(a) On the right of 0
(b) On the left of 0
(c) Above 0
(d) Below 0

Answer: (b) On the left of 0

Question 14.
What is the value of $124 \times 4{-}3 + 118 \div 2$?
(a) 552
(b) 496
(c) 553
(d) −553

Answer: (a) 552

Question 15.
Evaluate of $-50 \div 5$
(a) -10
(b) 10
(c) None of these

Answer: (a) -10
Division of 2 numbers of opposite signs is negative.

Question 16.
$-45 \div 9 = ?$
(a) 9
(b) 5
(c) -5
(d) None of these

Answer: (c) -5

Question 17.
$0 \div 9 =$
(a) 9

(b) 0
(c) None of these

Answer: (b) 0
Zero divided by any non-zero integer, the result is zero.

Question 18.
How is the withdrawal of RS. 200 represented?
(a) Depositing Rs. 200
(b) −Rs. 200
(c) Rs. 200
(d) −200

Answer: (b) −Rs. 200

Question 19.
Find predecessor of – 3
(a) – 2
(b) – 1
(c) None of these
(d) – 4

Answer: (d) – 4
Predecessor of an integer is just before it on the number line.

Question 20.
What is the nature of the product of a negative number by itself even number of times?
(a) Negative
(b) 0
(c) Positive
(d) Non-negative

Answer: (c) Positive

Question 21.
What will be the sign of the product if we multiply together 5 negative integers :
(a) positive
(b) Negative
(c) None of these

Answer: (b) Negative
Since 5 is odd so the product of 5 negative integers is negative.

Question 22.
$(-4) \times (-3) \times (-2) =$ _____
(a) 24
(b) -9
(c) 9
(d) -24

Answer: (d) -24

Question 23.
If a x (b −c) is 8 for a = 2, b = 10 and c = 6 then a x b − a x c is equal to
(a) (−8)
(b) 12
(c) 10
(d) 8

Answer: (d) 8

Question 24.
a + 0 =
(a) 0
(b) a
(c) -a
(d) None of these

Answer: (a) 0
If a is any integer, then sum of a with 0 is the number itself.

Question 25.
Successor of 11 is :
(a) 10
(b) 13
(c) None of these
(d) 12

Answer: (d) 12
Successor of an integer is right to it on a number line.

Question 26.
Find successor of – 16
(a) – 17
(b) – 15
(c) None of these
(d) – 16

Answer: (b) – 15
Successor of an integer is right to it on the number line.

Question 27.
If the dividend and divisor have unlike signs, what is the sign of the quotient?
(a) Positive
(b) Negative
(c) Zero
(d) Indeterminate

Answer: (b) Negative

Question 28.
Where do we place the positive numbers on a vertical number line with respect to 0?
(a) Above
(b) On its left side
(c) On its right side
(d) Below

Answer: (a) Above

Question 29.
5 and 3 are two integers then :
(a) 5 is smaller than 3
(b) both are equal
(c) 5 is greater than 3
(d) None of these

Answer: (c) 5 is greater than 3
Greater number is on the right of smaller on a number line.

Question 30.
Which amongst the following is the largest?
|-89|, -89, -21, |-21|
(a) -89
(b) -21
(c) |-89|
(d) |-21|

Answer: (c) |-89|

Question 31.
Which of the following is the smallest positive integer?
(a) 0
(b) 100
(c) 1
(d) 9

Answer: (c) 1

Question 32.
Complete the following using proper sign 8 □ 4.
(a) >
(b) <
(c) =
(d) None of these

Answer: (a) >
As 8 is on right hand on number line.

Question 33.
On a number line, when we add a negative integer, we
(a) move to the right
(b) move to the left
(c) do not move at all
(d) none of these

Answer: (b) move to the left

Question 34.
Find (- 3) x (- 2)

(a) – 6
(b) 6
(c) None of these

Answer: (b) 6
Product of 2 numbers of same sign is positive.

Question 35.
What is the opposite of earning Rs. 100?
(a) + Rs. 100
(b) Profit of Rs. 100
(c) Gain of Rs. 100
(d) Spending Rs. 100

Answer: (d) Spending Rs. 100

Question 36.
The product of (-) x (-) x (-) is :
(a) +
(b) –
(c) None of these

Answer: (b) –
The product of 3 negative integers is a negative integer.

Question 37.
What do we call the set of negative numbers and whole numbers?
(a) Natural numbers
(b) Integers
(c) Positive numbers
(d) The set of whole numbers

Answer: (b) Integers

Question 38.
$-5 \times (6) = ?$
(a) 6
(b) 5
(c) -30
(d) 30

Answer: (c) -30

Question 39.
Predecessor of 50 is :
(a) 51
(c) 49
(b) – 15
(d) None of these

Answer: (c) 49
Predecessor of an integer is just before it on the number line.

Question 40.
On a number line, when we add a positive integer, we
(a) move to the right
(b) move to the left
(c) do not move at all
(d) none of these

Answer: (a) move to the right

State whether true or false

Question 1.
The product of 3 negative integers is a negative integer.

Answer: true

Question 2.
$a \div b = b \div a$

Answer: false

Question 3.
Zero multiplied by any integer is zero.

Answer: true

Question 4.
a + b = b + a

Answer: true

Question 5.
When zero is divided by any non-zero integer the result is zero

Answer: true

Question 6.
The product of 6 negative integers is a negative integers.

Answer: false

Question 7.
9 ÷ 0 = 0.

Answer: true

Question 8.
a – b = b – a

Answer: false

Question 9.
The product of 4 negative integers is a negative integer.

Answer: false

Question 10.
Additive inverse of a is a.

Answer: false

Question 11.
a x b = b x a

Answer: true

Question12.
The product of 2 negative integers is a positive integer.

Answer: true

Fill in the blanks:

1. (- 206) ÷ …… = 1

Answer: – 206

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2. If ‘a’ is an integer, then (– a) is its …… inverse.

Answer: additive

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3. – 75 ÷ ……. = – 1

Answer: 1

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4. The sum of integers remains the …… even if, we change their orders.

Answer: same

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5. 11 ÷ (- 1) = ……..

Answer: – 11

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6. …… is an integer which is neither negative nor positive.

Answer: Zero

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7. Predecessor of Negative integer is …….. just to it on the number line.

Answer: left

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8. Sum of two integers is always an …… ?

Answer: integer

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9. Every integers has its …….. and its ……

Answer: predecessor,successor

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10. (- 87) ÷ ……. = 87

Answer: – 1

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11. Smallest positive integer is ……. and greatest negative integer is …….

Answer: 1, – 1

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12. (- 25) ÷ (- 1) ……

Answer: 25

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13. …… added to or subtracted from any integer is the integer itself.

Answer: zero

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14. 369 ÷ ……. = 369

Answer: 1

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15. Every positive integer is greater than its ……. integer.

Answer: negative

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16. (- 8) ÷ (- 1) = …….

Answer: 8

17. – 13 ÷ (1) = ……

Answer: – 13

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18. It is impossible to find greatest …….. and smallest …… integer.

Answer: positive,negative

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19. Successor of Positive integer is ……. to it on a number line

Answer: right

Replace the blank with an integer to make it a true statement.

20. (- 3) x …… = 27

Answer: – 9

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21. 5 x …….. = – 35

Answer: – 7

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22. …… x (- 8) = – 56

Answer: 7

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23. …….. x (- 12) = 132

Answer: – 11

Use >, < or sign =

24. (- 8) + (- 4) …… (- 8) – (- 4)

Answer: <

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25. (- 3) + 7 – (- 9) ……. 15-8 + (-9)

Answer: >

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26. 23 – 41 + 11 ……. 23 – 41 – 11

Answer: >

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27. 39 + (- 24) – (15) …….. 36 + (-52) – (- 36)

Answer: <

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match the following:

1.

1.	4 × (- 8)	(a)	– 18
2.	6 × (- 5)	(b)	– 21
3.	3 × (- 7)	(c)	– 30
4.	2 × (- 9)	(d)	– 32

Answer:

1.	4 × (- 8)	(a)	– 32
2.	6 × (- 5)	(b)	– 30
3.	3 × (- 7)	(c)	– 21
4.	2 × (- 9)	(d)	– 18

2.

1.	a × 1	(a)	not defined
2.	a × 0	(b)	a
3.	a ÷ 1	(c)	0
4.	a ÷ 0	(d)	a

Answer:

1. a × 1	(d) a
2. a × 0	(c) 0
3. a ÷ 1	(b) a
4. a ÷ 0	(a) not defined

3.

1. (– 316) × (- 1)	(a) – 360
2. (– 15) × 0 × (- 18)	(b) 162
3. 9 × (-3) × (-6)	(c) 316
4. (- 18) × (- 5) × (- 4)	(d) 0

Answer:

1. (– 316) × (- 1)	(c) 316
2. (– 15) × 0 × (- 18)	(d) 0
3. 9 × (-3) × (-6)	(b) 162
4. (- 18) × (- 5) × (- 4)	(a) – 360

4.

1. (- 100) ÷ 5	(a) – 15
2. (- 81) ÷ 9	(b) – 20
3. (- 75) ÷ 5	(c) – 16
4. (- 32) ÷ 2	(d) – 9

Answer:

1. (- 100) ÷ 5	(b) – 20
2. (- 81) ÷ 9	(d) – 9
3. (- 75) ÷ 5	(a) – 15
4. (- 32) ÷ 2	(c) – 16