



India's Number 1 Education App

## MATHS

### BOOKS - RD SHARMA MATHS (ENGLISH)

#### NEGATIVE NUMBERS AND INTEGERS

Others

1. Using the number line, write the integer which is:
- (i) 4 more than 3
  - (ii) 5 less than 2
  - (iii) 8 more than  $-9$
  - (iv) 4 less than  $-3$



Watch Video Solution

2. Which number in each of the following pairs is smaller?
- (i) 8,  $-8$
  - (ii) 0,  $-12$
  - (iii)  $-15$ ,  $-5$
  - (iv) 318,  $-356$



Watch Video Solution

3. Write the absolute value of each of the following: 12 (ii) – 32 (iii) 0

 Watch Video Solution

4. Write the absolute value of each of the following: (i) $a - 3$ , if  $a$  is greater than 3 (ii)  $a-5$ , if  $a$  is less than 5

 Watch Video Solution

5. Write the opposite of each of the following: (i) Increase in population  
(ii) Depositing money in a bank (iii) Earning money (iv) Going North

 Watch Video Solution

- 6.** Write the opposite of each of the following: (i) Gaining a weight of 4kg  
(ii) A loss of Rs. 1000 (iii) 25 (iv) – 15



**Watch Video Solution**

- 7.** Indicate the following by using integers: (i)  $25^0$  above zero (ii)  $5^0$  below zero (iii) A profit of Rs. 800 (iv) A deposit of Rs. 2500



**Watch Video Solution**

- 8.** Indicate the following by using integers: (i) 3km above sea level (ii) 2 km below sea level



**Watch Video Solution**

- 9.** Mark the following integers on a number line:  
(i) 7

(ii)  $-4$

(iii)  $0$



**Watch Video Solution**

**10.** Which number in each of the following pairs is smaller? (i)  $0, -4$  (ii)  $-3, 12$  (iii)  $8, 13$  (iv)  $-15, -27$



**Watch Video Solution**

**11.** Which number in each of the following pairs is larger? (i)  $3, -4$  (ii)  $-12, -8$  (iii)  $0, 7$  (iv)  $12, -18$



**Watch Video Solution**

**12.** Write all integers between:

(i)  $-7$  and  $3$

(ii)  $-2$  and  $2$

(iii)  $-4$  and  $0$

(iv)  $0$  and  $3$



**Watch Video Solution**

- 13.** How many integers are between? (i)  $-4$  and  $3$  (ii)  $5$  and  $12$  (iii)  $-9$  and  $-2$  (iv)  $0$  and  $5$



**Watch Video Solution**

- 14.** Replace \* in each of the following by  $<$   $>$  so that the statement is true: (i)  $2 * 5$  (ii)  $0 * 3$  (iii)  $0 * -7$  (iv)  $-18 * 15$  (v)  $-235 * -532$  (vi)  $-20 * 20$



**Watch Video Solution**

- 15.** Write the following integers in decreasing order: (i)  $-15, 0, -2, -9, 7, 6, -5, 8$  (ii)  $-154, 123, -205, -89, -74$



**Watch Video Solution**

**16.** Using the number line, write the integer which is: (i) 2 more than 3 (ii) 5 less than 3 (iii) 4 more than  $-9$

 **Watch Video Solution**

**17.** Write the absolute value of each of the following:

(i) 14

(ii)  $-25$

(iii) 0

(iv)  $-125$

 **Watch Video Solution**

**18.** Write the absolute value of each of the following: (i)  $-248$  (ii)  $a - 7$ , if  $a$  is greater than 7 (iii)  $a - 7$ , if  $a - 2$  is less than 7 (iv)  $a+4$ , if  $a$  is greater than  $-4$

 **Watch Video Solution**

19. Write the absolute value of each of the following:

(i)  $|a + 4|$  if  $a$  is less than  $-4$

(ii)  $|-3|$

(iii)  $-|-5|$

(iv)  $|12 - 5|$

[Watch Video Solution](#)

20. (i) Write 4 negative integers less than  $-10$  (ii) Write 6 negative integers just greater than  $-12$

[Watch Video Solution](#)

21. Which of the following statements are true? (i) The smallest integer is zero (ii) The opposite of zero is zero (iii) Zero is not an integer (iv) 0 is larger than every negative integer. (v) The absolute value of an integer is

greater than the integer. (vi) A positive integer is greater than its opposite  
(vii) Every negative integer is less than every natural number. (viii) 0 is the smallest positive integer.

 Watch Video Solution

22. Represent on the number line:  $3 + 4$

 Watch Video Solution

23. Represent on the number line:  $-3 + 4$

 Watch Video Solution

24. Represent on the number line:  $4 + (-3)$

 Watch Video Solution

**25.** Represent on the number line:  $( - 3) + ( - 4)$



**Watch Video Solution**

**26.** Add the integers: 1259 and 3214



**Watch Video Solution**

**27.** Add the integers:

– 5287 and 2432



**Watch Video Solution**

**28.** Add the integers :

– 523 and 937

A. 523

B. 937

C. 1460

D. 414

**Answer: D**



**Watch Video Solution**

**29.** Add the integers:

– 4732 and 3258



**Watch Video Solution**

**30.** Simplify:

( – 47352) + 21943



**Watch Video Solution**

**31.** Simplify:

$$94358 + (-76823)$$

A. 94823

B. 17535

C. 5876

D. -17535

**Answer: B**



**Watch Video Solution**

**32.** Draw a number line and represent each of the following on it:

$$5 + (-2) \text{ (ii)} (-9) + 4$$



**Watch Video Solution**

**33.** Draw a number line and represent each of the following on it:

$$(-3) + (-5)$$

$$(ii) 6 + (-6)$$



**Watch Video Solution**

**34.** Draw a number line and represent each of the following on it:

$$(i) (-1) + (-2) + 2$$

$$(ii) (-2) + 7 + (-9)$$



**Watch Video Solution**

**35.** Find the sum of:

$$(i) -557 \text{ and } 488$$

$$(ii) -522 \text{ and } -160$$



**Watch Video Solution**

**36.** Find the sum of:

- (i) 2567 and  $-325$
- (ii)  $-10025$  and 139



**Watch Video Solution**

**37.** Find the sum of:

- (i) 2547 and  $-2548$
- (ii) 2884 and  $-2884$



**Watch Video Solution**

**38.** Find the additive inverse of each of the following integers:

- (i) 52
- (ii)  $-176$
- (iii) 0
- (iv) 1



**Watch Video Solution**

 Watch Video Solution

**39.** Find the successor of each of the following integers:

- (i) -42
- (ii) -1
- (iii) 0



Watch Video Solution

**40.** Find the successor of each of the following integers:

- (i) -200
- (ii) -99



Watch Video Solution

**41.** Find the predecessor of each of the following integers:

- (i) 0

(ii) 1

(iii) -1



**Watch Video Solution**

**42.** Find the predecessor of each of the following integers:

(i) -125

(ii) 1000



**Watch Video Solution**

**43.** Which of the following statements are true? (i) The sum of a number and its opposite is zero. (ii) The sum of two negative integers is a positive integer. (iii) The sum of a negative integer and a positive integer is always a negative integer. (iv) The successor of  $-1$  is 1. (v) The sum of three different integers can never be zero.



**Watch Video Solution**

**44.** Write all integers whose absolute values are less than 5.



**Watch Video Solution**

**45.** Which of the following is false: (i)  $|4 + 2| = |4| + |2|$  (ii)  $|2 - 4| = |2| + |4|$  (iii)  $|4 - 2| = |4| - |2|$  (iv)  $|(-2) + (-4)| = |-2| + |-4|$



**Watch Video Solution**

**46.** Complete the following table: +, -6, -4, -2, 0, 2, 4, 6  
6, , , , , 10, 4, , , , , , 2, , , , , , 8 0, -6, , , , ,  
-2, , , , , , -4, , , , , 0, -6, , , , -6, , , From the above  
table: Write all the pairs of integers whose sum is 0. Is  
 $(-4) + (-2) = (-2) + (-4)$ ? Is  $0 + (-6) = -6$ ?



**Watch Video Solution**

**47.** Find an integer  $x$  such that

(i)  $x + 1 = 0$

(ii)  $x + 5 = 0$



**Watch Video Solution**

**48.** Find an integer  $x$  such that

(i)  $-3 + x = 0$

(ii)  $x + (-8) = 0$



**Watch Video Solution**

**49.** Find an integer  $x$  such that

(i)  $7 + x = 0$

(ii)  $x + 0 = 0$



**Watch Video Solution**

**50.** Subtract:

- (i) 4 from 9
- (ii)  $-4$  from 7
- (iii) 3 from  $-8$
- (iv)  $-9$  from  $-5$



**Watch Video Solution**

**51.** Subtract:

- (i)  $-1235$  from 4532
- (ii)  $-789$  from  $-1253$



**Watch Video Solution**

**52.** Subtract:

- (i) 3295 from  $-1247$
- (ii)  $-435$  from 0



**Watch Video Solution**

**53.** Find the value of:

$$412 + (-98) + (-84) + (-7) + 35$$



**Watch Video Solution**

**54.** Find the value of:

$$-21 + (-9) + 63 + (-22) + (-228) + 137$$



**Watch Video Solution**

**55.** Find the value of:  $-17 - (-13)$

A. 4

B. -4

C. 30

D. -30

**Answer: B**



**Watch Video Solution**

**56.** Find the value of:  $-7 - 8 - (-25)$

A.  $-40$

B.  $40$

C.  $10$

D.  $-10$

**Answer: C**



**Watch Video Solution**

**57.** Find the value of:  $50 - (-48) - (-2) - 110$



**Watch Video Solution**

**58.** Find the value of:

$$-12 + (-98) - (-84) + (-7)$$



**Watch Video Solution**

**59.** Find the value of:

$$-12 - [(-15) + (-2) + (-3)]$$



**Watch Video Solution**

**60.** Calculate :  $1 - 2 + 3 - 4 + 5 - 6 + 7 - 8 \pm \dots + 19 - 20$



**Watch Video Solution**

**61.** Calculate the sum:  $2 + (-2) + 2 + (-2) + 2 + (-2) +$  (i)if the number of terms is 140 (ii)if the number of terms is 125



**Watch Video Solution**

**62.** The sum of two integers is 48. If one of the integers is  $-24$ , determine the other.



**Watch Video Solution**

**63.** The sum of two integers is  $-396$ . If one of them is 64, determine the other.



**Watch Video Solution**

**64.** If  $\Delta$  is an operation on integers such that for integers  $a$  and  $b$ ,  
 $a\Delta b = a - b - (-2)$  Find the value of: (i)  $2\Delta 3$  (ii)  $(-3)\Delta(-4)$  (iii)  
 $3\Delta(-5)$  (iv)  $(-4)\Delta 3$



**Watch Video Solution**

**65.** On a particular day, the temperature of Delhi at 10 a.m. was  $13^0C$  but by the mid-night, it fell down to  $6^0C$ . The temperature of Chennai at 10 a.m. the same day was  $18^0C$  but fell down to  $10^0C$  by the mid-night. Which fall is greater?



**Watch Video Solution**

**66.** Subtract the first integer from the second in each of the following:

- (i) 12, - 5
- (ii) - 12, 8
- (iii) - 225, - 135



**Watch Video Solution**

**67.** Subtract the first integer from the second in each of the following:

- (i) 1001, 101
- (ii) - 812, 3126
- (ii) 7560, - 8



Watch Video Solution

**68.** Subtract the first integer from the second in each of the following:

(i)  $-3978, -4109$

(ii)  $0, -1005$



Watch Video Solution

**69.** Find the value of:

(i)  $-27 - (-23)$

(ii)  $-17 - 18 - (-35)$



Watch Video Solution

**70.** Find the value of:

(i)  $-12 - (-5) - (-125) + 270$

(ii)  $373 + (-245) + (-373) + 145 + 3000$



Watch Video Solution



Watch Video Solution

71. Find the value of:

$$1 + (-475) + (-475) + (-475) + (-475) + 1900$$

$$(-1) + (-304) + 304 + 304 + (-304) + 1$$



Watch Video Solution

72. Subtract the sum of  $-5020$  and  $2320$  from  $-709$



Watch Video Solution

73. Subtract the sum of  $-1250$  and  $1138$  from the sum of  $1136$  and  $-1272$



Watch Video Solution

74. From the sum of  $233$  and  $-147$ , subtract  $-284$

A. -370

B. 86

C. 370

D. -86

**Answer: C**



**Watch Video Solution**

**75.** The sum of two integers is 238. If one of the integers is  $-122$ , determine the other.



**Watch Video Solution**

**76.** The sum of two integers is  $-223$ . If one of the integers is  $172$ , find the other.



**Watch Video Solution**

77. Evaluate the following: (i)

$$-8 - 24 + 31 - 26 - 28 + 7 + 19 - 18 - 8 + 33 \quad (\text{ii})$$

$$-26 - 20 + 33 - (-33) + 21 + 24 - (-25) - 26 - 14 - 34$$



[Watch Video Solution](#)

78. Calculate:  $1 - 2 + 3 - 4 + 5 - 6 + \dots + 15 - 16$



[Watch Video Solution](#)

79. Calculate the sum:  $5 + (-5) + 5 + (-5) +$  if the number of terms is 10. if the number of terms is 11.



[Watch Video Solution](#)

80. Replace \* by  $<$  or  $>$  in each of the following to make the statement true: (i)  $(-6) + (-9) \cdot (-6) - (-9)$

$$(ii)(-12) - (-12) \cdot (-12) + (-12)$$



**Watch Video Solution**

81. Replace \* by < or > in each of the following to make the statements true: (i)  $(-20) - (-20) *$   $20 - (65)$  (ii)  $28 - (-10) *$   $(-16) - (-76)$



**Watch Video Solution**

82. If ? is an operation on integers such that  $a ? b = -a + b - (-2)$  for all integers  $a, b$ . Find the value of : (i)  $4 ? 3$  (ii)  $(-2) ? (-3)$  (iii)  $6 ? (-5)$  (iv)  $(-5) ? 6$



**Watch Video Solution**

83. If  $a$  and  $b$  are two integers such that  $a$  is the predecessor of  $b$ . Find the value of  $a - b$ .



**Watch Video Solution**

**84.** If  $a$  and  $b$  are two integers such that  $a$  is the successor of  $b$ . Find the value of  $a - b$ .



**Watch Video Solution**

**85.** Which of the following statements are true: (i)  $-13 > 8(-2)$  (ii)  $-4 + (-2) < 2$  (iii) The negative of a negative integer is positive. (iv) If  $a$  and  $b$  are two integers such that  $a > b$ , then  $a - b$  is always positive integer. (v) The difference of two integers is an integer. (vi) Additive inverse of a negative integer is negative. (vii) Additive inverse of a positive integer is negative. (viii) Additive inverse of a negative integer is positive.



**Watch Video Solution**

**86.** Fill in the blanks: (i)  $-7 + \underline{\quad} = 0$  (ii)  $29 + \underline{\quad} = 0$  (iii)  $132 + (-132) = \underline{\quad}$  (iv)  $-14 + \underline{\quad} = 22$  (v)  $-1256 + \underline{\quad} = -742$  (vi)  $\underline{\quad} - 1234 = -4539$



**Watch Video Solution**

87. Which of the following statement is true? (a)  $-7 > -5$  (b)  $-7 < -5$  (c)  $(-7) + (-5) > 0$  (d)  $(-7) - (-5) > 0$



Watch Video Solution

88. 5 less than  $-2$  is

A. 3

B.  $-3$

C.  $-7$

D. 7

**Answer: C**



Watch Video Solution

**89.** 6 more than  $-7$  is

- (a) 1
- (b)  $-1$
- (c) 13
- (d)  $-13$



**Watch Video Solution**

**90.** If  $x$  is a positive integer, then (a)  $x+|x|=0$  (b)  $x-|x|=0$  (c)  $x+|x|=-2x$  (d)  
 $x=-1|x|$



**Watch Video Solution**

**91.** If  $x$  is a negative integer, then (a)  $x + |x| = 0$  (b)  $x - |x| = 0$   
 $x + |x| = -2x$  (d)  $x = -|x|$



**Watch Video Solution**

- 92.** If  $x$  is a negative integer, then (a)  $x + |x| = 0$  (b)  $x - |x| = 0$  (c)  $x + |x| = -2x$  (d)  $x = -|x|$



**Watch Video Solution**

- 93.** If  $x$  is greater than 2, then  $|2 - x| =$
- (a)  $2 - x$   
(b)  $x - 2$   
(c)  $2 + x$   
(d)  $-x - 2$



**Watch Video Solution**

- 94.**  $9 + |-4|$  is equal to:
- (a) 5  
(b) -5  
(c) 13  
(d) -13



**95.**  $( - 35) + ( - 32)$  is equal to

- (a) 67
- (b)  $- 67$
- (c)  $- 3$
- (d) 3



**96.**  $( - 29) + 5$  is equal to:

- (a) 24
- (b) 34
- (c)  $- 34$
- (d)  $- 24$



**97.**  $| - | - 7| - 3|$  is equal to

(a)  $-7$

(b)  $7$

(c)  $10$

(d)  $-10$



**Watch Video Solution**

**98.** The successor of  $-22$  is

A.  $-23$

B.  $-21$

C.  $23$

D.  $21$

**Answer:** B



**Watch Video Solution**

**99.** The predecessor of  $-14$  is

A.  $-15$

B.  $15$

C.  $13$

D.  $-13$

**Answer:** A



**Watch Video Solution**

**100.** If the sum of two integers is  $-26$  and one of them is  $14$ , then the other integer is

(a)  $-12$

(b)  $12$

(c)  $-40$

(d)  $40$



**Watch Video Solution**

**101.** Which of the following pairs of integers have 5 as a difference?

- (a) 10, 5
- (b) -10, -5
- (c) 15, -20
- (d) both (a) and (b)



**Watch Video Solution**

**102.** If the product of two integers is 72 and one of them is -9 , then the other integer is

- (a) -8
- (b) 8
- (c) 81
- (d) 63



**Watch Video Solution**

**103.** On subtracting  $-7$  from  $-14$ , we get

A. -21

B. -7

C. -14

D. 21

**Answer:** B



**Watch Video Solution**

**104.** The largest number that divides 64 and 72 and leave the remainders 12 and 7 respectively, is

(a) 17

(b) 13

(c) 14

(d) 18



**Watch Video Solution**

**105.** The sum of two integers is  $-23$ . If one of them is 18, then the other is

(a) -14

(b) 14

(c) 41

(d) -41



**Watch Video Solution**

**106.** The sum of two integers is  $-35$ . If one of them is 40, then the other is

(a) 5

(b) -75

(c) 75

(d) -5



**Watch Video Solution**

**107.** On subtracting  $-5$  from  $0$ , we get

A.  $-5$

B.  $5$

C.  $50$

D.  $0$

**Answer:** B



**Watch Video Solution**

**108.**  $(-16) + 14 - (-13)$  is equal to:

A.  $-11$

B.  $12$

C.  $11$

D.  $-15$

**Answer: C**



**Watch Video Solution**

**109.**  $( - 2) \times ( - 3) \times 6 \times ( - 1)$  is equal to

- (a) 36
- (b) - 36
- (c) 6
- (d) - 6



**Watch Video Solution**

**110.**  $86 + ( - 28) + 12 + ( - 34)$  is equal to:

- (a) - 36
- (b) 40
- (c) 36
- (d) - 40



**Watch Video Solution**

**111.**  $( - 12) \times ( - 9) - 6 \times ( - 8)$  is equal to:

(a) 156

(b) 60

(c) -156

(d) -60



**Watch Video Solution**

**112.** The successor of -79 is

A. -80

B. -78

C. 80

D. 78

**Answer: B**



**Watch Video Solution**

**113.** The predecessor of  $-99$  is

A.  $-98$

B.  $-100$

C.  $98$

D.  $100$

**Answer:** B



**Watch Video Solution**

**114.** The integer 8 more than  $-12$  is

(a) 4

(b)  $-4$

(c)  $-20$

(d) 20



**Watch Video Solution**

**115.** What should be added to 18 to get  $-34$

- (a) 52
- (b)  $-52$
- (c)  $-16$
- (d) 16



**Watch Video Solution**

**116.** The additive inverse of 17 is

- A.  $-17$
- B. 17
- C.  $\frac{1}{17}$
- D.  $-\frac{1}{7}$

**Answer:** A



**Watch Video Solution**

117. If an integer  $a$  is greater than 7, then  $|7 - a| =$

- (a)  $7 - a$
- (b)  $a - 7$
- (c)  $7 + a$
- (d)  $-7 - a$

[Watch Video Solution](#)

118. The additive identity element in the set of integers is

- A. 1
- B.  $-1$
- C. 0
- D. None of these

**Answer: C**

[Watch Video Solution](#)



**119.** Which of the following pairs of integers have 9 as a difference? (a) 19, 10 (b) -19, -10 (c) 19, -10 (d) (a) and (b) both



**Watch Video Solution**

**120.** When 47 is subtracted from -23, we get

A. 70

B. 24

C. -24

D. -70

**Answer:** D



**Watch Video Solution**

**121.** If  $\diamond$  is an operation on integers such that  $a \diamond b = a - b - 2$ , for all integers,  $a, b$ . Then,  $7 \diamond (-4) =$

- (a) 11
- (b) -9
- (c) 9
- (d) 1



**Watch Video Solution**

**122.** Simplify:  $(-145) + 97 + (-365) + (-71) + 8$



**Watch Video Solution**

**123.** The sum of two integers is 84. If one of the integers is 44, determine the other.

A. 40

B. 44

C. -40

D. 84

**Answer: A**



**Watch Video Solution**

124. Simplify:  $9 \times (-16) + (-17) \times (-16)$



**Watch Video Solution**

125.

If

$$x = (-23) + 22 + (-23) + 22 + \dots \dots (40 \text{ terms}) \text{ and } y = 11 + (-10) + \dots \dots$$

Then the value of  $y - x$  is



**Watch Video Solution**

126. Calculate:  $1 - 2 + 3 - 4 + 5 - 6 + 7 - 8 + \dots + 49 - 50$ .



Watch Video Solution

127. Evaluate:  $7|x - 15| - | - 9|x 8$



Watch Video Solution

128. Find the value of  $38 - (-25) - 58 + (-15) + 23 - (-8)$

A. 22

B. 21

C. 36

D. 23

Answer: B



Watch Video Solution

**129.** Simplify:  $5 + (-5) + 5 + (-5) +$  When the number of terms is 20 when the number of terms is 25.



**Watch Video Solution**

**130.** If  $\Delta$  is an operation on integers such that for integers  $a$  and  $b$ ,  $a\Delta b = a - b - (-5)$  Find the value of (i)  $(-7)\Delta 3$  (ii)  $(-9)\Delta(-4)$  (iii)  $2\Delta 5$  (iv)  $4\Delta(-5)$



**Watch Video Solution**

**131.** Evaluate:  $-36 - 40 + 43 - (-29) + 18 - (-74)$

A. 80

B. -63

C. -88

D. 88

**Answer: D**



**Watch Video Solution**

**132.** The largest negative integer is .....



**Watch Video Solution**

**133.** The smallest positive integer is .....



**Watch Video Solution**

**134.**  $( - 22) + 21 + ( - 22) + 21 + \dots$  20 terms is equal .....



**Watch Video Solution**

**135.** Find the value of

$$(-3)(-4)(12)(-1) = \dots$$



**Watch Video Solution**

**136.** Find the value of

$$(-1)(-1)(-1)(-1) = \dots$$



**Watch Video Solution**