



India's Number 1 Education App

MATHS

BOOKS - RS AGGARWAL MATHS (HINGLISH)

INTEGERS

Example

1. Add

i 36 and 27

ii -31 and -25

A. (i) 63

(ii) -56

B. (i) 62

(ii) 56

C. (i) -63

(ii) 56

D. (i) 61

(ii) -55

Answer: A



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2. Add

i $-47 + 18$

ii $(-29) + 52$

A. (i) -29

(ii) 23

B. (i) -28

(ii) 22

C. (i) – 19

(ii) – 23

D. (i) 29

(ii) – 23

Answer: A



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3. Subtract

i -8 from 5

ii 7 from (-6)

iii -9 from -5

A. (I) -13

(ii) 13

(iii) 4

B. (I) 13

(ii) -13

(iii) 4

C. (I) 14

(ii) -16

(iii) 4

D. (I) 13

(ii) - 23

(iii) - 4

Answer: B



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Example Summary

1. Write

- i a pair of integers whose sum is -8,
- ii a pair of integers whose difference is -12
- iii a pair of integers whose sum is 0,
- iv a negative integer and a positive integer whose sum is -6,
- v a negative integer and a positive integer whose difference is -4.



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2. Write a pair of integers whose difference gives

i zero

ii a negative integer

iii an integer smaller than both the integers,

iv an integer greater than both the integers,

v an integer greater than only one of the integers.



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3. The sum of two integers is -11. If one of them is 9, find the other.

A. -30

B. -20

C. -40

D. -10

Answer: B



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4. The difference of an integer a and (-5) is -3 . Find the value of a .

A. -7

B. 8

C. 7

D. -8

Answer: D



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Examples Multiplication Of Integers

1. Find each of the following products:

i $6 \times (-5)$

ii $(-7) \times 9$

iii $35 \times (-18)$

iv $(-42) \times 20$



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2. Find each of the following products:

i 12×16

$$\text{ii } (-8) \times (-14)$$

$$\text{iii } (-25) \times (-19)$$

$$\text{iv } (-70) \times (-31)$$



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3. Simplify:

$$\text{i } 8 \times (-15) + 8 \times 6$$

$$\text{ii } (-18) \times 7 + (-18) \times (-4)$$

$$\text{iii } 15 \times (-32) + 15 \times (-18)$$

$$\text{iv } 16 \times (-9) + (-8) \times (-9)$$



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4. Evaluate:

i $(- 1) \times (- 2) \times (- 3) \times (- 4) \times (- 5)$

ii $(- 3) \times (- 5) \times (- 2) \times (- 4)$

iii $(- 2) \times (- 2) \times (- 2) \times$ 8 times

iv $(- 2) \times (- 2) \times (- 2) \times$... 9 times

v $(- 1) \times (- 1) \times (- 1) \times$... 100 times

vi $(- 1) \times (- 1) \times (- 1) \times$... 301 times



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5. What will be the sign of the product if we multiply together 199 negative and 10 positive integers?

A. *Positive*

B. *Negative*

C. both positive and negative

D. none of these

Answer: B



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6. In a class test containing 20 questions, 4 marks are given for every correct answer and (-2) marks are given for every incorrect answer. Ranjita attempts all questions and 12 of her answers are correct. What is her total score?

A. 24

B. 30

C. 32

D. 40

Answer: C



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7. A shopkeeper gains rs. 1 on each pen and loses 40 paise on each pencil. He sells 45 pens and some pencils losing Rs. 5 in all. How many pencils does he sell?



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8. A certain freezing process requires that room temperature be lowered from 40°C at the rate of 5°C per hour. What will be the room temperature 12 hours after the process begins?

A. -21°C

B. -20°C

C. -16°C

D. -18°C

Answer: B



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Examples Division Of Integers

1. Evaluate

i $-48/12$

ii $(-48)/(-16)$

iii $(-69)/23$



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2. Evaluate

i) $-98 \div 14$

ii) $(-48) \div (-16)$

iii) $(-90) \div (-15)$



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3. Evaluate

i) $(-133) \div 19$

ii) $168 \div (-14)$

iii) $(-336) \div (-21)$



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4. Fill in the blanks

i $(-37) / (\dots) = 1$

ii $(\dots) / 36 = -2$

iii $(\dots) / 69 = 0$

iv $(\dots) + (-18) = -5$



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5. An elevator descends into a mine shaft at the rate of 6 m/min. If the descent starts from

20 m above the ground level, how long will it take to reach 370 m ?

A. 4 hr. 5 min

B. 3 hr. 5 min

C. 1 hr. 5 min

D. 2 hr. 5 min

Answer: C



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Exercise 1 A

1. Evaluate

i $15+(-8)$

ii $(-16)+9$

iii $(-7)+(-23)$

iv $(-32)+47$

v $53+(-26)$

vi $(-48)+(-36)$



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2. Find the sum of

i 153 and -302

ii 1005 and -277

iii -2035 and 297

iv -489 and -324

v -1000 and 438

vi -238 and 500



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3. Find the additive inverse of:

i -83

ii 256

iii 0

iv -2001



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4. Subtract:

i 28 from-42

ii -36 from 42

iii -37 from -53

iv -66 from -34

v 318 from 0

vi -153 from -240

vii -64 from 0

viii -56 from 144



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5. Subtract the sum of -1032 and 878 from -34.

A. 140

B. 120

C. 110

D. 100

Answer: B



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6. Subtract -134 from the sum of 38 and -87.

A. 85

B. 75

C. 65

D. 55

Answer: A



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7. Fill in the blanks:

i $\{(-13) + 27\} + (-41) = (-13) + \{27 + (\dots)\}$

ii $(-26) + \{(-49) + (-83)\} = \{(-26) + (-49)\} + (\dots)$

iii $53 + (-37) = (-37) + (\dots)$

iv $(-68) + (-76) = (\dots) + (-68)$

$$v (-72) + (...) = -72$$

$$vi -(-83) = \dots$$

$$vii (-60) - (...) = -59$$

$$viii (-31) -+ -(...) = -40$$



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8. Simplify: $\{-13 - (-27)\} + \{-25 - (-40)\}$.

A. 27

B. 29

C. 31

D. 25

Answer: B



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9. Find $36 - (-64)$ and $(-64) - 36$. Are they equal?

A. *Yes*

B. *No*

C. *May be*

D. *Not sure*

Answer: B



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10. If $a = -8$, $b = -7$, $c = 6$, verify that $(a + b) + c = a + (b + c)$.



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11. If $a = -9$ and $b = -6$, show that $(a - b) = (b - a)$.



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12. The sum of two integers is -16. If one of them is 53, find the other.

A. 69

B. -69

C. 70

D. -70

Answer: B



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13. The sum of two integers is 65. If one of them is -31, find the other.



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14. The difference of an integer a and (-6) is 4.
Find the value of a .



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- 15.** Write a pair of integers whose sum gives
- i zero,
 - ii a negative integer,
 - iii an integer smaller than both the integers,
 - iv an integer greater than both the integers,
 - v an integer smaller than only one of the integers.



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16. For each of the following statements, write

(T) for true and (F) for false:

i The smallest integer is zero.

ii -10 is greater than -7 .

iii Zero is larger than every negative integer.

iv The sum of two negative integers is a negative integer.

v The sum of a negative integer and a positive integer is always a positive integer.



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Exercise 1 B

1. Multiply:

i 16 by 9

ii 18 by-6

iii 36 by-11

iv -28 by 14

v -53 by 18

vi -35 by 0

vii 0 by -23

viii -16 by-12

ix -105 by-8

x -36 by-50

xi -28by-1

xii 25 by -11



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2. Find each of the following products:

i $3 \times 4 \times (-5)$

ii $2 \times (-5) \times (-6)$

iii $(-5) \times (-8) \times (-3)$

iv $(-6) \times 6 \times (-10)$

$$\text{vii} \quad 7 \times (-8) \times 3$$

$$\text{viii} \quad (-7) \times (-3) \times 4$$



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3. Find each of the following products:

$$\text{i} \quad (-4) \times (-5) \times (-8) \times (-10)$$

$$\text{ii} \quad (-6) \times (-5) \times (-7) \times (-2) \times (-3)$$

$$\text{iii} \quad (60) \times (-10) \times (-5) \times (-1)$$

$$\text{iv} \quad (-30) \times (-20) \times (-5)$$

$$\text{v} \quad (-3) \times (-3) \times (-3) \times \dots \text{6 times}$$

$$\text{vi} \quad (-5) \times (-5) \times (-5) \times \dots \text{5 times}$$

vii $(- 1) \times (- 1) \times (- 1) \times \dots$ 200 times

viii $(- 1) \times (- 1) \times (- 1) \times \dots$ 171 times



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4. What will be the sign of the product, if we multiply 90 negative integers and 9 positive integers?

A. +ve

B. -ve

C. none of the signs

D. cannot be determined

Answer: A



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5. What will be the sign of the product, if we multiply 103 negative integers and 65 positive integers?

A. $-ve$

B. $+ve$

C. Both

D. None

Answer: A



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6. Simplify:

i $(- 8) \times 9 + (- 8) \times 7$

ii $9 \times (- 13) + 9 \times (- 7)$

iii $20 \times (- 16) + 20 \times 14$

iv $(16) \times (- 15) + (- 16) \times (- 5)$

$$\text{v } (-11) \times (-15) 4 - (-11) \times (-25)$$

$$\text{vi } 10 \times (-12) + 5 \times (-12)$$

$$\text{vii } (-16) \times (-8) + (-4) \times (-8)$$

$$\text{viii } (-26) \times 72 + (-26) \times 28$$



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7. Fill in the blanks

$$\text{i } (-6) \times (\dots\dots\dots) = 6$$

$$\text{ii } (-18) \times (\dots\dots\dots) = (-18)$$

$$\text{iii } (-8) \times (-9) = (-9) \times (\dots)$$

$$\text{iv } 7 \times (-3) = (-3) \times (\dots)$$

$$\text{v } \{(-5)x3\}x(-6) = (\dots) \times \{3 \times (-6)\}$$

$$\text{vi } (-5)x(\dots) = 0$$



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8. In a class test containing 10 questions, 5 marks are awarded for every correct answer and (-2) marks are awarded for every incorrect answer and 0 for each question not attempted.

i Ravi gets 4 correct and 6 incorrect answers.

What is his score?

ii Reenu gets 5 correct and 5 incorrect answers. What is her score?

iii Heena gets 2 correct and 5 incorrect answers. What is her score?



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9. Which of the following statements are true and which are false?

i The product of a positive and a negative integer is negative.

ii The product of two negative integers is a

negative integer.

iii The product of three negative integers is a negative integer.

iv Every integer when multiplied with -1 gives its multiplicative inverse.

v Multiplication on integers is commutative.

vi Multiplication on integers is associative.

vii Every nonzero integer has a multiplicative inverse as an integer.



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1. Divide:

i 65 by-13

ii -84 by 12

iii -76 by 19

iv -132 by 12

v -150 by 25

vi -72 by-18

vii -105 by-21

viii -36 by -1

ix 0 by -31

x -63 by 63

xi -23 by -23

xii -8 by 1



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2. Fill in the blanks:

i $72 / 4 - (\dots) = -4$

ii $-36 / 4 - (\dots) = -4$

iii $(\dots) / (-4) = 24$

iv $(\dots) / 25 = 0$

v $(\dots) / (-1) = 36$

vi $(\dots) / 1 = -37$

vii $39 / (\dots) = -1$

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

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



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3. Write (T) for true and (F) for false for each of the following statements:

i $0 / (-4) = 0$

ii $(-6) / 0 = 0$

iii $(-5) / (-1) = -5$

iv $(-8) / 1 = -8$

$$v (-1)/(-1) = -1$$

$$vi (-9)/(-1) = 9$$



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Exercise 1 D

$$1. 6 - (-8) = ?$$

A. -2

B. 2

C. 14

D. none of these

Answer: C



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$$2. -9 - (-6) = ?$$

A. -15

B. -3

C. 3

D. none of these

Answer: B



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3. By how much does 2 exceed -3 ?

A. -1

B. 1

C. -5

D. 5

Answer: D



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4. What must be subtracted from -1 to get -6 ?

A. 5

B. -5

C. 7

D. -7

Answer: A



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5. How much less than -2 is -6?

A. 4

B. -4

C. 8

D. -8

Answer: A



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6. On subtracting 4 from -4, we get

- A. 8
- B. -8
- C. 0
- D. none of these

Answer: B



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7. By how much does -3 exceed -5 ?

A. -2

B. 2

C. 8

D. -8

Answer: B



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8. What must be subtracted from -3 to get -9 ?

A. -6

B. 12

C. 6

D. -12

Answer: C



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9. On subtracting 6 from -5, we get

- A. 1
- B. 11
- C. -11
- D. none of these

Answer: C



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10. On subtracting -13 from -8 , we get

A. -21

B. 21

C. 5

D. -5

Answer: C



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$$11. (-36) / (-9) = ?$$

A. 4

B. -4

C. none of these

D. 8

Answer: A



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$$12.0 + (-5) = ?$$

A. -5

B. 0

C. 8

D. none of these

Answer: A



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13. $(- 8) - 0 = ?$

A. -8

B. 0

C. 9

D. none of these

Answer: A



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14. Which of the following is a true statement?

A. $-11 > -8$

B. $-11 < -8$

C. -11 and -8 cannot be compared

D. $12 < 0$

Answer: B



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15. The sum of two integers is 6. If one of them is -3 , then the other is

A. -9

B. 9

C. 3

D. -3

Answer: B



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16. The sum of two integers is -4 . If one of them is 6 , then the other is

A. -10

B. 10

C. 2

D. -2

Answer: A



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17. The sum of two integers is 14. If one of them is -8, then the other is

A. 22

B. -22

C. 6

D. -6

Answer: A



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18. The additive inverse of -6 is

A. $\frac{1}{6}$

B. $-\frac{1}{6}$

C. 6

D. 5

Answer: C



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19. Evaluate $(- 15) \times 8 + (- 15) \times 2 = ?$

A. 150

B. $- 150$

C. 90

D. $- 90$

Answer: B



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$$20. (-12) \times 6 - (-12) \times 4 = ?$$

A. 24

B. -24

C. 120

D. -120

Answer: B



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21.

$$(-27) \times (-16) + (-27) \times (-14) = ?$$

A. -810

B. 810

C. -54

D. 54

Answer: B



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$$22. 30 \times (-23) + 30 \times 14 = ?$$

A. -270

B. 270

C. 1110

D. -1110

Answer: A



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23. The sum of two integers is 93. If one of them is -59, the other one is

A. 34

B. -34

C. 152

D. -152

Answer: C



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$$24. \frac{?}{-18} = -5$$

A. -90

B. 90

C. None of these

D. All of the two

Answer: B



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Test Paper 1 A

1. The sum of two integers is -12 . If one of them is 43 , find the other.

A. 55

B. -55

C. -25

D. 25

Answer: B



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2. The difference of an integer p and -8 is 3 .

Find the value of p .



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3. Add the product of (-16) and (-9) to the quotient of (-132) by 6 .

A. 111

B. 102

C. 122

D. 120

Answer: C



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4. By what number should (-240) be divided to obtain 16?



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5. What should be divided by (-7) to obtain 12?

A. -84

B. 84

C. - 48

D. 48

Answer: A



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6. Evaluate

i $(-6) \times (-15) \times (-5)$

ii $(-8) \times (-5) \times 9$

iii $9 \times (-12) \times 10$

vi $(- 75) \times 8$

v $(- 5) \times (- 5) \times (- 5)$ taken 5 times

vi $(- 1) \times (- 1) \times (- 1) \times$ taken 25

times



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Test Paper 1 B

1. The sum of two integers is -6 . If one of them is 2 , then the other is

A. -4

B. 4

C. 8

D. -8

Answer: D



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2. What must be subtracted from -7 to obtain -15 ?

A. -8

B. 8

C. -22

D. 22

Answer: B



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$$3. (?) /(-18) = -6$$

A. -108

B. 108

C. 3

D. none of these

Answer: B



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$$4. (-37) \times (-7) + (-37) \times (-3) = ?$$

A. 370

B. -370

C. 148

D. -148

Answer: A



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5. Evaluate : $(-25) \times 8 + (-25) \times 2 = ?$

A. 250

B. 150

C. -250

D. – 150

Answer: C



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$$6. (-9) - (-6) = ?$$

A. – 15

B. – 3

C. 3

D. 15

Answer: B



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7. How much less than -2 is -8 ?

A. 6

B. -6

C. 10

D. -10

Answer: A



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Test Paper 1 C

1. Fill in the blanks.

i $(- 35) \times \dots = 35$

ii $(- 53) \times (\dots) = - 53$

iii $(- 14) \times (\dots) = (- 16) \times (- 14)$

iv $(- 21) \times (\dots) = 0$

v $(- 119) + 17 = (\dots)$

vi $(- 247) + (\dots) = 13$

$$\text{vii } (...) + 31 = 0$$

$$\text{viii } (...) + (-19) = -8$$



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Test Paper 1 D

1. Write 'T' for true and 'F' for false for each of the following:

$$\text{i } 0 + (-16) = 0$$

$$\text{ii } (-8) + 0 = 0$$

$$\text{iii } (-1) + (-1) = -1$$

$$\text{iv } (-36) + (-1) = 36$$

$$\text{v } (-52) + 13 = -4$$

$$\text{vi } 68 + (-17) = 4$$



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