

Class 7. Mathematics

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Subject : Mathematics

Chapter : Integers

Answer Key & Solution

ASSIGNMENT 1. Exercise 1.1

2. $-5^{\circ}\text{C} - 2^{\circ}\text{C} = -7^{\circ}\text{C}$ temp on tue
 $-7^{\circ}\text{C} + 4^{\circ}\text{C} = -3^{\circ}\text{C}$ temp on Wed
3. Vertical distance = $6000 + 1500$
 $= 7500\text{m}$
4. Deposit = $+3000$
Withdrawal = -1355
Balance = $3000 - 1355 = \text{Rs. } 1645$
7. (i). $(-7) + (-4) \underline{\hspace{1cm}} (-7) - (-4)$
 $-7 - 4 \quad \underline{\hspace{1cm}} -7 + 4$
 $-11 < -3$
- (ii) $(-5) + 8 - (19) \underline{\hspace{1cm}} 17 - 8 + (-9)$
 $-5 + 8 - 19 \underline{\hspace{1cm}} 17 - 8 - 9$
 $+8 - 24 \underline{\hspace{1cm}} 17 - 17$
 $-16 < 0$
- (iii) $13 - 31 + 11 \underline{\hspace{1cm}} 13 - 31 - 11$
 $-31 + 24 \underline{\hspace{1cm}} 13 - 42$
 $-7 > -29$
- (iv) $49 + (-24) - (15) \underline{\hspace{1cm}} 36 + (-52) - (-36)$
 $49 - 24 - 15 \underline{\hspace{1cm}} 36 - 52 + 36$
 $49 - 39 \underline{\hspace{1cm}} 72 - 52$
 $10 < 20$
- (v) $-231 + 79 + 51 \underline{\hspace{1cm}} -399 + 159 + 81$
 $-231 + 130 \underline{\hspace{1cm}} -399 + 240$
 $-101 > -150$

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ASSIGNMENT 2. Exercise 1.2

1. $-5, 2$; $-5 + 2 = -3$
 $-2, 3$; $-2 - 3 = -5$
 $1, -1$; $+1 - (-1) = 1 + 1 = 2$
2. -8 and 5 . $-8 - (+5) = -8 + 5 = -3$
 4 and 4 . $+4 - 4 = 0$
 10 and 8 . $10 - 8 = 2$
 9 and 4 . $9 - 4 = 5$
 2 and -3 . $2 - (-3) = 2 + 3 = 5$
3. -3 and -11 ; $-3 - (-11) = -3 + 11 = 8$
 -3 and 0 ; $-3 + 0 = -3$

4. one team score.

$$32 + (-45) + (-17)$$

$$32 - 45 - 17 = 32 - 62 = -30$$

Another team score

$$32 + (-45) + (-17)$$

$$32 - 45 - 17 = 32 - 62 = -30$$

Both teams had same score. yes.

5.(i) $(-8) + (-2) = (-2) + (-8)$

(ii) $-93 + 0 = -93$

(iii) $17 + (-17) = 0$

(iv) $[14 + (-12)] + -7 = 14 + [(-12) + (-7)]$

(v) $(-7) + [15 + (-3)] = [-7 + 15] + -3$

6. $5 + 16 = 21$

$$-5 + 16 = 11$$

$$-5 + (-16) = -5 - 16 = -21$$

$$0 + (-178) = 0 - 178 = -178$$

$$-17 + 0 = -17$$

7. $15 - 15 = 0$

$$15 - (-15) = 15 + 15 = 30$$

$$-38 - (-35) = -38 + 35 = -3$$

$$50 - (-42) = 50 + 42 = 92$$

$$40 - (-39) = 40 + 39 = 79$$

8. $-x = 5$

$$-x = -8$$

$$x = 0$$

$$-x = -6$$

$$-x = +5$$

$$-x = +7 + 12$$

9.(i) $(-1+7) + (-8) = -1 + [7 + (-8)]$

$$6 - 8 = -1 - 1$$

$$-2 = -2$$

(ii) $0 + (-19) + -27 = 0 + [-19 + (-27)]$

$$-19 - 27 = 0 - 19 - 27$$

$$-46 = -46$$

(iii) $(-138+(-39))+57 = -138+(-39+57)$

$$(-138-39)+57 = -138+(18)$$

$$-177+57 = -138+18$$

$$-120 = -120$$

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ASSIGNMENT 3. Exercise 1.3

1. $5 \times (-1) = -5$

$$(-1) \times 375 = -375$$

$$(-11) \times (-30) = 330$$

$$(-778) \times (-1) = 778$$

$$(-18) \times (-10) \times 9 = 1670$$

$$(-15) \times (-7) \times 0 = 0$$

$$(-2) \times (-3) \times (-4) \times (-5) = 120$$

$$(-20) \times (-2) \times (-5) \times (7) = -1400$$

$$(-18) \times (-5) \times (-4) = -360$$

$$(-1) \times (-5) \times (-4) \times (-6) = 120$$

2. LHS.	RHS
$(-30) \times [13+(-3)].$	$[(-30) \times 13]+$
$(-30) \times (13-3).$	$[(-30) \times (-3)]$
$-30 \times 10.$	$(-390) + (90)$
$-300.$	-300

LHS.	RHS
$18 \times [7 +(-3)].$	$[18 \times 7]+[18 \times -3]$
$18 \times 4.$	$126 - 54$
72	72

4. $-1 \times 32 = -32$
 $-1 \times -47 = 47$
 $-1 \times 0 = 0$
 $-1 \times 22 = -22$

6.(i) $46 \times (-48) + (-48) \times (-36)$
 $-2208 + 1728 = -480$

(ii). $16 \times 39 \times (-25) = -15600$

(iii). $25 \times (-5) \times (-4) = 25 \times 20 = 500$

(iv) $15 \times (-25) \times (-4) \times 0 = 0$

(v). $-37 \times (102) = -3774$

(vi) $725 \times (-55) + (-725) \times 65$
 $= -39875 + (-47125)$
 $= -39875 - 47125 = -87000$

(vii). $18 \times (100 - 2) = 18 \times 98 = 1764$

(viii). $(-27) \times (-29) = 783$

(ix). $(-57) \times (-19) + 57$
 $1083 + 57 = 1140$

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ASSIGNMENT 4. Exercise 1.4

1. $(-50) \div 5 = -10$
 $84 \div (-21) = -4$
 $(-96) \div (-8) = 12$
 $(-311) \div (-311) = 1$
 $19 \div [(-5)+4]=19 \div (-1) = 19 \div -1 = -19$
 $0 \div (-17) = 0$
 $(-53) \div [(-50) + (-3)]= -53 \div -53 = 1$

$$[(-48) \div 12] \div 4 = (-4) \div 4 = -1$$

$$[(-7) + 12] \div [(-6) + 5] = 5 \div (-1) = -5$$

$$[(-18) \div (-6)] \div [(-17) - (-16)] =$$

$$= (2) \div (-17 + 16) = 2 \div (-1) = -2$$

2. $1 \div a = 1$. No
 $a \div (-1) = -1$. No.

3(i) $a \div (b+c)$ is not equal to $(a \div b) + (a \div c)$
 $-16 \div (4+4)$ is not equal to
 $(-16 \div 4) + (-16 \div 4)$
 $-16 \div 8$ is not equal to $(-4) + (-4)$
 -2 is not equal to -8

(ii). $-10 \div (1+1)$ is not equal to
 $(-10 \div 1) + (-10 \div 1)$
 $-10 \div 2$ is not equal to $-10 + (-10)$
 -5 is not equal to -20

4. $297 \div 1 = 297$
 $(-85) \div 85 = -1$
 $(-405) \div (-405) = 1$
 $-97 \div -1 = 97$
 $-97 \div 1 = -97$
 $-58 \div 58 = -1$
 $30 \div -10 = -3$
 $-30 \div 6 = -5$

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