

SUBJECT- MATHEMATICS
CLASS VII
ANSWERSHEET OF WORKSHEET – 1

Q1. Choose the correct alternative:

(i) The successor of -140 is -139

a) -148 b) -141 c) -139 d) -151

(ii) The smallest integer lying between -7 and 15 is -6

a) -7 b) 14 c) -15 d) -6

(iii) The negative integer is always less than 0

a) 0 b) -3 c) -1 d) -2

(iv) Number of integers lying between -4 and 4 is 7

a) 0 b) 8 c) 7 d) 6

(v) 0 is an additive identity of integers.

a) 0 b) 1 c) -1 d) -2

Q.2 State whether the following statements are true or false:

a) When two positive integers are added, we get a positive integer. True

b) When two negative integers are added, we get a positive integer. False

b) When a positive integer and a negative integer are added, we always get a positive integer. False

d) Additive inverse of 6 is (-6). True

e) $(-10) + 3 = 10 - 3$ False

Q.3 Solve and put the sign of $>$, $<$ or $=$ in the box:

a) $(-7) + (-5) < (-7) - (-5)$

b) $(-2) + 7 - (9) < 12 - 8 + (-7)$

Q.4 Arrange the following integers in descending order.

-36, 73, -23, 99, -73, 0

Ans. 99, 73, 0, -36, -73

Q.5 Subtract the following:

a) (-13) from (-75)

$-75 - (-13)$

$= -75 + 13$

$= -62$

b) 17 from (-10)

$-10 - (17)$

$= -10 - 17$

$= -27$

Q.6 What must be added to -25 to get 9?

Ans. $9 - (-25) = 9 + 25 = 34$

Q.7 Write all the integers lying between

a) -4 and 3 b) -3 and 4 c) -5 and 5 d) -6 and 2

Ans. a) -3, -2, -1, 0, 1, 2

b) -2, -1, 0, 1, 2, 3

c) -4, -3, -2, -1, 0, 1, 2, 3, 4

d) -5, -4, -3, -2, -1, 0, 1

Q.8 Evaluate each of the following expressions:

$$\begin{array}{ll} \text{Ans. a) } (-126) - (-105) - 56 - (-43) & \text{b) } 81 - (-181) - (88) - (-41) \\ = -126 + 105 - 56 + 43 & = 81 + 181 - 88 + 41 \\ = -182 + 148 & = 303 - 88 \\ = 34 & = 215 \end{array}$$

Q.9 The sum of two integers is -265. If one of the integer is 161, find the other integer.

$$\text{Ans. Other integer} = -265 - (161) = -426$$

Q.10 Write a pair of integers whose

$$\begin{array}{ll} \text{a) sum is } -7 & \text{b) difference is } -10 \\ -3, -4 \text{ because } (-3) + (-4) = -7 & -6, 4 \text{ because } (-6) - 4 = -10 \\ \text{c) sum is } 0 & \text{d) difference is } 9 \\ -5, 5 \text{ because } (-5) + 5 = 0 & 10, 1 \text{ because } 10 - 1 = 9 \end{array}$$

Q.11 Find the product, using suitable properties:

$$\begin{array}{ll} \text{a) } 26 \times [(-25) \times 4] & \text{b) } 8 \times 35 \times (-125) \\ = 26 \times (-100) & = [8 \times (-125)] \times 35 \quad (\text{Associative property}) \\ = -2600 & = (-1000) \times 35 = -35000 \\ \\ \text{c) } 560 \times (-35) + (-560) \times 65 & \text{d) } -68 \times 102 \\ = 560 \times (-35 - 65) & = -68 \times (100 + 2) \\ = 560 \times -100 & = (-68) \times 100 + (-68) \times 2 \quad (\text{Distributive property}) \\ = -56000 & = -6800 - 136 = -6936 \end{array}$$

Q.12 Evaluate each of the following:

$$\begin{array}{ll} \text{a) } 23 \div [(-2) + 1] & \text{b) } [(-48) \div 12] \div 4 \\ = 23 \div -1 & = -4 \div 4 \\ = -23 & = -1 \end{array}$$

ANSWERSHEET OF WORKSHEET – 2

Q.1 Fill in the blanks :

- i) 0 ii) -1 iii) not defined iv) 1 v) absolute value

$$\begin{array}{ll} \text{Q.2 i)} & \text{L.H.S.} = a \times (b + c) \\ & = 18 \times [7 + (-3)] \\ & = 18 \times 4 \\ & = 72 \\ & \text{R.H.S.} = a \times b + a \times c \\ & = 18 \times 7 + 18 \times (-3) \\ & = 126 + (-54) \\ & = 72 \\ & \text{L.H.S.} = \text{R.H.S.} \\ & \text{Hence verified} \end{array}$$

<p>ii) L.H.S. = $a \times (b + c)$ $= -21 \times [(-4) + (-6)]$ $= -21 \times (-10)$ $= 210$ L.H.S. = R.H.S.</p>	<p>R.H.S = $a \times b + a \times c$ $= (-21) \times (-4) + (-21) \times (-6)$ $= 84 + 126$ $= 210$</p>
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Hence verified

- Q.3 (9, -3) because $9 \div (-3) = -3$
(12, -4) because $12 \div (-4) = -3$
(15, -5) because $15 \div (-5) = -3$
(-6, 2) because $-6 \div (2) = -3$

Q.4 a) 1, 2, 3, 4, 5

b) 0, 1, 2, 3, 4, 5

c) -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5

Q.5 Raghu has marbles at the end of the games = $30 + 5 \times 3 + 7 \times (-2)$

$$= 30 + 15 - 14$$

$$= 45 - 14 = 31$$

Q.6 Fill in the blanks with $>$, $<$ or $=$.

a) $-360 + 400 < 70$

b) $(-11) \times 11 < (-11) \times (-11)$

c) $7 \times (-9) < (-6) \times (-5)$

d) $(-4) \times (-3) > (-5) \times 0$

Q.7 Balance amount in Gaurav's account = $2000 + 300 + 750 + 450 + (-700) + (-1250)$

$$= 3500 + (-1950)$$

$$= \text{Rs.}1550$$

Q.8 a) Rohit's score = $4 \times 4 + 6 \times (-1) = 16 - 6 = 10$

b) Arushi's score = $5 \times 4 + 5 \times (-1) = 20 - 5 = 15$

Q.9 a) 0

b) 14

c) 12

d) not defined

Q.10 a) $16 + (126 \div 14) - 13 \times 2$

b) $-(-71) - (-100) + 200$

$$= 16 + 9 - 26$$

$$= 71 + 100 + 200$$

$$= 25 - 26 = -1$$

$$= 371$$

ANSWERSHEET of WORKSHEET - 3

Q 1 (i) a (ii) a (iii) a (iv) b (v) a

Q.2 a) $\frac{7}{10} + \frac{2}{5} + \frac{3}{2}$

$$= \frac{7+4+15}{10} = \frac{26}{10} = \frac{13}{5} = 2\frac{3}{5}$$

(b) $\frac{17}{2} - \frac{29}{8} = \frac{68-29}{8} = \frac{39}{8} = 4\frac{7}{8}$

Q.3 (a) $\frac{8}{15}, \frac{7}{20}, \frac{9}{35}$

$$= \frac{224, 147, 108}{420}$$

$$\therefore 224 < 147 < 108$$

$$\therefore \frac{8}{15} < \frac{7}{20} < \frac{9}{35}$$

(b) $\frac{5}{8}, \frac{1}{4}, \frac{1}{6}$

$$\frac{30, 12, 8}{48}$$

$$\therefore 30 < 12 < 8$$

$$\therefore \frac{5}{8} < \frac{1}{4} < \frac{1}{6}$$

Q4. $\frac{4}{7} = \frac{8}{14} = \frac{12}{21} = \frac{16}{28} = \frac{20}{35} = \frac{24}{42}$

Q5 a) $\frac{8}{5}$ (b) $\frac{4}{11}$ (c) 11

Q6 (a) $\frac{3}{7} \times \frac{7}{8} = \frac{3}{8}$ (b) $\frac{7}{2} \times \frac{3}{8} = \frac{21}{16}$

Q7 (a) $\frac{1}{2} \times \frac{11}{4} = \frac{11}{8} = 1\frac{3}{8}$ (b) $\frac{7}{2} \times \frac{3}{8} = \frac{21}{16} = 1\frac{5}{16}$

Q8 (a) $3 \times \frac{27}{4} = \frac{81}{4} = 20\frac{1}{4}$ (b) $\frac{5}{6} \times \frac{17}{7} = \frac{85}{42} = 2\frac{1}{42}$

Q9 Raj solved = $\frac{2}{7}$ Part
Rita solved = $\frac{4}{5}$ Part

$$\frac{2}{7}, \frac{4}{5}$$

$$\frac{10, 28}{35}$$

$$10 < 28 \therefore \frac{2}{7} < \frac{4}{5}$$

Hence Raj solved lesser Part

Q10 (a) $\frac{1}{5} \times 45 = 9$

(b) $\frac{2}{5} \times 45 = 18$

(c) $45 - 9 - 18$
 $= 45 - 27$
 $= 18$

ANSWERSHEET OF WORKSHEET – 4

Q.1 i) One hundredth ii) 0.034 L iii) 61.003 iv) $\frac{6}{1000}$ v) 3.47 kg vi) 4.2 kg

Q.2 a) 41.002 b) 13.141

Q.3 a) $300 + 5 + \frac{3}{100}$ b) $2 + \frac{3}{10} + \frac{4}{100}$

c) $70 + 4 + \frac{3}{10} + \frac{5}{1000}$ d) $500 + 60 + 7 + \frac{2}{1000}$

Q.4 a) 5 b) 50 c) 0.5 d) 0.05

Q.5 $92.5 \text{ km} - 58 \text{ km} = 34.5 \text{ km}$

Q.6 a) $0.7 > 0.07$ b) $3.02 < 3.20$

c) $0.9 < 0.99$ d) $8.08 > 0.80$

Q.7 $500.87 - 312.987 = 187.883$

Q.8 a) $45 \text{ mm} = \frac{45}{10} \text{ cm} = 4.5 \text{ cm}$

b) $6 \text{ kg} + \frac{8}{1000} \text{ kg}$

$4.5 \text{ cm} = \frac{4.5}{100} \text{ m} = 0.045 \text{ m}$

$= 6 \text{ kg} + 0.008 \text{ kg}$

$0.045 \text{ m} = \frac{0.045}{1000} \text{ km} = 0.000045 \text{ km}$

$= 6.008 \text{ kg}$

So, $45 \text{ mm} = 4.5 \text{ cm} = 0.045 \text{ m} = 0.000045 \text{ km}$

Q.9 a) 7.383 b) 302.334

Q.10 Distance travelled by Raj = $AB+BC= 9.5 + 13.7= 23.2 \text{ km}$

Distance travelled by Anil = $AD+DC= 9.3 + 12.8= 22.1\text{km}$

Raj travelled more distance by 1.1 km