

INTERNATIONAL INDIAN SCHOOL, RIYADH

VII - Mathematics [Integers]

Academic Year 2011-2012

1) Verify $a - (-b) = a + b$ for the following values of 'a' and 'b'.

(a) $a = 75, \quad b = 84$

(b) $a = 118, \quad b = 125$

(c) $a = 25, \quad b = 30$

2) Write down a pair of integers whose

(a) Sum is -3

(b) Sum is 0

(c) Difference is 2

(d) Difference is -5

3) Verify the following :

a) $(-21) \times [(-4) + (-6)] = [(-21) \times (-4)] + [(-21) \times (-6)]$

b) $15 \times [6 + (-3)] = [15 \times 6] + [15 \times (-3)]$

c) $(-15) \times [(-8) + (-6)] = [(-15) \times (-8)] + [(-15) \times (-6)]$

4) Evaluate :

a) $(-100) \div 5$

b) $(-36) \div (-4)$

c) $(-41) \div [(-40) + (-1)]$

d) $0 \div (-18)$

e) $[(-36) \div 12] \div 3$

f) $(-50) \div (50)$

g) $60 \div (-6)$

h) $(-48) \div -48$

i) $(-13) \div (13)$

5) Do as directed :

1. In a test (+5) marks are given for every correct answer and (-2) marks are given every incorrect answer.

(i) Radhika answered all the questions and scored 30 marks though she got 10 correct answers.

(ii) Jay also answered all the questions and scored (-12) marks though he got 4 correct answers. How many incorrect answers had they attempted ?

6) In a class test containing 15 questions 4 marks are given for every correct answer and (-2) marks are given for every incorrect answers :

i) Gurupreet attempts all question but only 9 of her answers are correct. What is her total score ?

ii) One of her friends gets only 5 answers correct. What will be her score ?

7) Write five pairs of integers (a, b) such that $a \div b = -6$.

8) Find

i) $(-3) \times (-6) \times (-2) \times (-1)$

ii) $(-12) \times (-11) \times (10)$

iii) $(-320) \times (-1)$

iv) $(-18) \times 0 \times (-16)$

v) $9 \times (-5) \times (-3)$

vi) $(-41) \times 10$

vii) $(-21) \times (-30)$

viii) $(-1) \times 225$

ix) $(-22) \times (-1)$

x) $(-20) \times (-2) \times (-5) \times 7$

9) Use the sign $>$, $<$, $=$

i) $29 + (-18) - 15$ $36 - (-15) + 28$

ii) $-241 + 76 + 86$ $- 399 + 163 + 45$

iii) $(-3) + 7 - (-18)$ $18 - 9 + (-6)$

iv) $(-8) + (-6)$ $(-8) - (-6)$

v) $(-18) + (18)$ $(-31) + (31)$

vi) $86 - 45 + 23$ $-36 - (20) - (-8)$

10) In a quiz, positive marks are given for correct answers and negative marks are given for incorrect answers. If Jack's scores in five successive rounds were 65, -10, -15, 20, 30. What was his total score at the end.

11) In a quiz, team A scored -50, 30, 0 and team B scored 60, 30, -40 in three successive rounds. Which team scored more ?

12) The temperature at 12 noon was 10°C above zero. If it decreases at the rate of 2°C per hour until midnight, at what time would the temperature be 8°C below zero? What would be the temperature at mid - night ?

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

a) _____ $\times (-12) = -60$

b) $5 \times$ _____ $= -35$

c) $(-8) \times$ _____ $= 72$

d) _____ $\div (-3) = 9$

e) $(-20) \div$ _____ $= 5$

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Answers:

4) a) -20 b) 9 c) 1 d) 0 e) -1 f) -1 g) -10

h) 1 i) -1

5) Sol: (i) 10 (ii) 16 6) Sol: (i) 24 (ii) 0

8) (i) 36 (ii) 1320 (iii) 320 (iv) 0 (v) 135
(vi) -410 (vii) 630 (viii) -225 (ix) 22 (x) -1400

9) (i) < (ii) > (iii) > (iv) < (v) = (vi) >

10) Sol: 90 11) Sol: Team A Marks - 20

Team B Marks 50

12) Sol: 9pm ; - 14°C

13) Sol: a) 5 b) -7 c) 9 d) 27 e) -4