

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) $a = 75$, $b = 84$
- (b) $a = 118$, $b = 125$
- (c) $a = 25$, $b = 30$

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.

- Radhika answered all the questions and scored 30 marks though she got 10 correct answers.
- 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 :

- Gurupreet attempts all question but only 9 of her answers are correct. What is her total score ?
- 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) $(-20) \div$ _____ $= 5$

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**