## INTERNATIONAL INDIAN SCHOOL, RIYADH WORK SHEET - SA2 <br> VI - MATHEMATICS

## INTEGERS

## IFill in the blanks

1. The integer 5 more than ( -2 ) is $\qquad$
2. The greatest negative integer is $\qquad$
3. All natural numbers are $\qquad$ integers
4. $25-(-2)=$ $\qquad$
5. $(-35)+(-15)=$ $\qquad$
6. $46+(-98)=$ $\qquad$
7. The additive inverse of $(-13)$ is $\qquad$
8. The integer which is neither positive nor negative is $\qquad$
9. 0 is larger than every $\qquad$ integer.
10. $\qquad$ $+(-14)=-9$

## II Answer the following :

1. Represent as an integer with suitable sign.
a. Saving Rs. 2500.
b. Going 450 m below the sea level.
2. Add using number line.
a. 5 more than ( -3 )
b. $(-2)+(-6)$
3. Arrange in descending order .
$(-45),(-86),(-17),(-95)$
4. Write six integers less than (-4).
5. Which number will be reach if we move 5 numbers to the left of ( -6 )?
6. Which is greater ? $(-23)$ or $(-45)$
7. Find the sum of $(-39)$ and $(-63)$
8. Subtract (-8) from 25.
9. If we are at 5 on the number line, in which direction should we move to reach (-9)?
10. Add :- $(-460)+125+(-325)+250$
11. Subtract: a) (-40) - (25)
b) $105-(-76)$
12. Find
a) $(-42)+26-(-15)$
b) $(-25)-14-(-75)$

## Ratio and proportion

1 Find the ratio of the following
a. $\quad 15$ minutes to an hour
b. $\quad 50 \mathrm{gm}$ to 1.5 kg
c. $\quad 40 \mathrm{~cm}$ to 2.5 m
d. $\quad 15$ paise to five rupees
e. 45 seconds to 2 minutes
f. 10 metres to 25 cm
g. 250 gm to a kilogram

2 In a box containing 80 bulbs, 15 were found to be defective. Find the ratio of defective to good bulbs.

3 The ratio of the length and breadth of a football ground is $3: 2$. Find the length if the breadth is 28 metres.
4. Sumita gets pocket money of ₹ 500 per month. Out of which she saves ₹ 40 per month. Find the ratio of her savings to the amount she gets.
5. Sumit buys pencils at the rate of $₹ 36$ per dozen and pens at the rate of ₹ 72 per dozen. Find the ratio of cost of a pencil to cost of a pen.
6. Divide ₹ 200 between Rita and Gita in the ratio $2: 3$
7. Determine if the following ratios from a proportion
a. $20 \mathrm{~cm}: 1 \mathrm{~m}$ and $3.5 \ell: 17.5 \ell$
b. $\quad 2 \mathrm{~kg}: 80 \mathrm{~kg}$ and $25 \mathrm{~g}: 625 \mathrm{~g}$
c. $\quad 200 \mathrm{~m} \mathrm{\ell}: 2.5 \ell$ and ₹ 4 : ₹ 50
d. $\quad 440 \mathrm{~m}: 2 \mathrm{~km}$ and $55 \mathrm{~cm}: 3 \mathrm{~m}$
8. A worker is paid ₹ 560 for 5 days. What should be paid to the worker for 28 days.
9. A family of 4 members consumes 6 kg of sugar in a month. What will be the monthly consumption of sugar if the number of family members becomes 6 .
10. A car travels 165 km in 3 hrs .
a. How long will it take to travel 440 km ?
b. How far will it travel in 7 hrs .
11. 15 boys can type 270 pages a day how many pages 36 boys can type a day.
12. The weight of 15 bags of rice is 112.5 kg
a. What is the weight of 10 such bags
b. How many bags will weigh 750 kg .

## Practical Geometry

1. Draw any circle and mark points $x, y$ and $z$ such that ' $x$ ' is on the circle, $y$ in the interior of the circle and ' $z$ ' is in the exterior of the circle.
2. Draw any line segment $A B$, construct $P Q \overline{\text { without measuring } A B-~}$ such that the length of $P Q$ is twice that of $A B$.
3. Draw any line segment XY. Mark any point M on it. Through M draw a perpendicular to XY . (use ruler and compasses)
4. Draw a line segment of length 10 cm and construct its perpendicular bisector.
5. Draw a line segment of length 12 cm . using compasses divide it into four equal parts verify by actual measurement.
6. Draw an angle of measure $140^{\circ}$ and construct its bisector.
7. Draw an angle measure $150^{\circ}$ and divide it into four equal parts.
8. Construct with ruler and compasses, angles of following measures.
a. $60^{\circ}$,
b. $30^{\circ}$
c. $90^{\circ}$
d. $120^{\circ}$
e $45^{\circ}$

1) Can you draw a triangle which has
a) exactly one line of symmetry
b) exactly two lines of symmetry?
c) exactly three lines of symmetry ?
d) no lines of symmetry ?
2) Find the number of lines of symmetry in each of the following shapes ?

3) Consider the letters of English alphabets, A to Z.

List among them the letters which have
a) Vertical lines of symmetry
b) Horizontal lines of symmetry
c) No lines of symmetry
4) Complete the following table :

| S1\# | Shape | Rough Figure | Number of lines <br> of symmetry |
| :---: | :---: | :---: | :---: |
| 1. | Equilateral <br> triangle |  |  |
| 2. | Square |  |  |
| 3. | Rectangle |  |  |
| 4. | Isosceles <br> Triangle |  |  |
| 5. | Rhombus |  |  |
| 6. | Circles |  |  |
| 7. | Parallelogram |  |  |
| 8. | Scalene Triangle |  |  |

5) Write some application of symmetry in everyday life.
