

INTERNATIONAL INDIAN SCHOOL *RIYADH*
MATHEMATICS WORKSHEET CLASS – VI 2015–16
ALGEBRA

- 1) Choose the correct answer.
- a) If 'a' is the side of the square then perimeter = _____
(a^2 , $4a$, ab , $2a$)
 - b) $a \times (\text{_____}) = a \times b + a \times c$
($b \times c$, $b \div c$, $b - c$, $b + c$)
 - c) Given that $x = 3$, then the value of $2x + 5$ equals
(8, 11, 7, 1)
 - d) The perimeter of a regular hexagon of side 'l' = _____
($4l$, $6l$, l^2 , $8l$)
 - e) If 523 is multiplied by x and 139 is added to the product then the algebraic expression is _____.
($523(x + 139)$, $523x + 139$, $(523 + 139)x$, $523 + 139x$)
 - f) 8 added to the product of 12 and y is written as
($8y + 12$, $12 + 8y$, $12y + 8$, $8 + 12 + y$)
- 2) State which of the following are equations. Give reasons.
- a) $2 \times 5 - 3 = 7$
 - b) $2x + 6 = 12$
 - c) $y/2 + 1 = 5$
 - d) $4x = 12$
 - e) $8/2 = 4$
 - f) $15 < m - 8$
 - g) $3y = 15 + 3$
 - h) $5z / 10 > 0$
- 3) State true or false.
- a) Area of a rectangle = $l \times b$.
 - b) $x = 4$ is a solution for $3x = 12$.
 - c) x , y , 23 are all variables.
 - d) $a = 3$ is a solution for $a + 6 = 9$
- 4) Give expressions for the following.
- a) 10 is added to x.
 - b) r is multiplied by . Then, 7 is added to the product.
 - c) p is multiplied by $2/3$.

- d) y is divided by 3 and then added to $\frac{2}{3}$
- e) Twice of n added to 6
- f) $-k$ multiplied to 3 and then added to 20
- g) 1 sixth of m subtracted from x

5) Answer the following.

- a) Ritu is 5 years older than Sudha. Find an expression for Ritu's age in terms of Sudha's age.
- b) 5 students are sitting in a bench. Find the number of students sitting in n benches.
- c) The price of a puzzle book is 3 times the price of an English book. What is the price of the English book if the price of puzzle book is Rs. 27?
- d) Sunanda wants to distribute 4 sweets to each of her class mates. She runs short of 8 sweets. Find the number of sweets with her if there are x students in her class.
- e) Puneet, Akhil and Vinod write a math test. Puneet gets y marks. Akhil gets 5 marks less than Puneet, and Vinod gets 7 marks more than Puneet. Express Akhil's marks and Vinod's marks in terms of Puneet.

6) Find the solution for the following.

- a) $x + 3 = 10$
- b) $y - 6 = 15$
- c) $m/9 = 4$
- d) $8n = 48$
- e) $2a + 5 = 11$
- f) $17 - a = 14$
- g) $p/5 = 9$
- h) $12k = 72$

7) Check out the solution from the values given in the bracket. Show that other values do not satisfy the equation.

- a) $X + 8 = 10$ { 0, 1, 2, 3 }
- b) $16 - y = 5$ { 8, 1, 6, 11 }
- c) $3m = 21$ { 3, 7, 6, 10 }
- d) $r/5 = 4$ { 10, 20, 5, 15 }

INTERNATIONAL INDIAN SCHOOL *Riyadh*

CLASS VI MATHS WORKSHEET 2015-2016

Ratio and Proportion

Q1) Find the ratio of the following:-

1. 4 min to 30secs
2. 500gm to 2kg
3. 55cm to 250m

Q2) The boys and girls in a school are in the ratio 4:5. The total strength of the school is 567. Find the number of boys and girls in school.

Q3) Rajiv and Shamita have Rs. 128 and Rs. 192 respectively. Express the amounts they had as a ratio in its simplest form.

Q4) Ron and Forb decided to divide their sweets in the ratio 3:4. They had 700 sweets in all. How many sweets did each one have?

Q5) Rs. 420 is divided between A, B and C in the ratio 1:2:3 respectively. Find each one's share.

Q6) Divide Rs. 750 among Seema and Hiba in the ratio 1:2.

Q7) In a school, out of 340 students, 200 are girls. Find the ratio of:

- a. No of girls to total no of students
- b. No of boys to no of girls
- c. No of boys to total no of students

Q8) There are 102 male teachers and 51 female teachers in a school. The total number of students is 3400. Find the ratio of:

- a. Male teachers to female teachers
- b. Male teachers to number of students
- c. Female teachers to number of students

Q9) There are 55 people working in a company. If the number of females is 25 and the remaining are males, find the ratio of:

- a. No of females to no of males
- b. No of males to no of females

Q10) Ratio of distance of school from Rajiv's house to distance of school from Joan's house is 3:1. Who lives nearer to school? Complete the table which shows some possible distances that Rajiv and Joan could live:

Distance from Rajiv's home to school	3	<input type="checkbox"/>	12	<input type="checkbox"/>
Distance from Joan's home to school	1	7	<input type="checkbox"/>	10

Q11) Present age of father is 48 years and that of his son is 12 years. Find the ratio of:-

- Present age of father to present age of son
- Age of father to age of son, when son was 8 years old
- Age of father to age of son when father was 42 years old

Q12) Cost of a dozen apples is Rs480 and cost of 9 oranges is Rs. 108. Find the ratio of cost of apples to cost of oranges.

Q13) Cost of a toffee is 50 ps. and cost of a chocolate is Rs. 10. Find the ratio of cost of toffee to cost of a chocolate.

Q14) Find x, if $5 : 10 :: x : 30$

Q15) Find x, if 36,47,60 and x are in proportion

Q16) Find x, if 18, x, 27 and 36 are in proportion

Q17) Which of the following are not in proportion:-

- $16 : 24 :: 20 : 30$
- $8 : 9 :: 24 : 27$
- $12 : 18 :: 18 : 12$
- $21 : 6 :: 35 : 14$

Q18) If distance travelled by a car in 3 hrs. is 120 Km, then distance travelled by a car in 5 hrs. is how much?

Q19) The cost of 20 metres of cloth is Rs. 280. Find the cost of 12 metres of cloth.

Q20) A motorbike travels 100 km in 2 litres of petrol. How much petrol is required for 350 Km?

Q21) The price of 4m of cloth is Rs. 228. What is the price of 15m of such cloth? How many metres of cloth can be bought for Rs. 627?

Q22) The weight of 63 articles is 7 Kg:-

- a. What is the weight of 90 such articles?
- b. How many such articles would weigh 5 Kgs?

Q23) At a party of 240 people, it was estimated that one bottle of cold drink would be sufficient for 4 people. How many bottles of cold drinks are needed for 240 people?

Q24) 12 Kg of vegetable oil costs Rs. 84. Find the cost of 8Kg of vegetable oil.

Q25) The weight of 12 books of 84 Kg. What is the weight of 56 books? How many such books would weigh 14 kgs?

Q26) **Fill in the blanks**

1. If two _____ are equal, we say that they are in proportion.
2. The ratio of 90 cm to 1.5 m is _____
3. $15 : 18 = _ : 6$
4. In proportion first and the last terms are called _____
5. The ratio is said to be in simplest form if common factor is _____
6. $32m : 64 m = 6 \text{ sec} : _$