

Chapter-11 (Algebra)

Class-VI

Subject-Mathematics

1. Renu is 24 years younger than her mother. What is Renu's age in terms of her mother's age? (Take her mother's age to be x years).
2. The side of a regular pentagon is denoted by l . Express the perimeter of the regular pentagon using l .
3. Write the algebraic expressions for the following.
 - i) decrease y by 9
 - ii) the sum of y and 5
 - iii) b added to sum of a and 4
 - iv) x less than -7
4. Identify the operations (addition, subtraction, multiplication, division) in formation of the following expressions and tell how the expressions have been formed.
 - i) $p + 10$
 - ii) $-5y + 2$
5. The length of a rectangular park is 3 metres more than 2 times the breadth of the park. What is the length if the breadth is b metres?
6. State which of the following are equations (with a variable).
 - i) $x + 4 = 7$
 - ii) $7q < 15$
 - iii) $40 = 5n$
7. Form algebraic expressions by using variables for each of the following statements.
 - i) Ravi's mother is 2 years more than twice Ravi's age.
 - ii) Price of petrol increased by Rs 7 per litre.
8. Write the algebraic expressions for the following.
 - i) b added to 5 times a
 - ii) 3 times the sum of x and y
9. A pen and a pencil cost Rs. 60. If the pencil costs Rs. x . What is the cost of the pen?
10. Write a statement for each of the following equations
 - i) $8 + y = 7$
 - ii) $y - 3 = 7$
11. Write each of the following as an equation
 - i) Sum of y and 5 is 16
 - ii) 7 times a number x equals 42
12. Pick out the solution from the values given in the bracket. Show that the other values do not satisfy the equation $m - 2 = 0$ (2, -2, 0)

Chapter-12 (Ratio and Proportion)

Class-VI

Subject-Mathematics

1. There are 30 oranges and 18 apples in a fruit basket. What is the ratio of the
 - i) number of oranges to the number of apples ?
 - ii) number of apples to the total number of fruits in the basket ?
2. Find the ratio of Rs 125 to Rs 275
3. Convert the ratio 28 : 42 in its simplest form.
4. Are 50 , 75 , 30 , 45 in proportion ?
5. Find the ratio of 15 minutes to 3 hours.
6. The cost of 7 kg of mangoes is Rs 434. How many kg of mangoes can be purchased for Rs 341.
7. Divide 30 mangoes between Radha and Rekha in the ratio 3 : 2.
8. Nirmal is 69 years old and Purnima is 21 years old. Find the ratio of
 - i) Purnima's age to difference of their ages
 - ii) Nirmal's age to sum of their ages.
9. The mass of 5 bags of cement is 250 kg . What is the mass of 90 bags of cement?
10. Determine if the following ratios form a proportion.
60 persons : 50 persons and 180 L : 150 L
11. Find the equivalent ratio of 3 : 5
12. Cost of 6 dozen oranges is Rs 90. How many oranges can be purchased for Rs 27.50 ?
13. Find the ratio of 3 weeks to 35 days.
14. A machine prints 1000 newspaper in 30 minutes. How many newspaper will it print in 2.5 hours?
15. Are the ratios 10 minutes : 1 hour and 6 hours : 36 hours in proportion?