## Subject : Mathematics

## Worksheet

## Class : VI

1. The sides of two squares are in the ratio 5:7. Find the ratio of their areas.
2. Articles are bought at Rs 45 per dozen and sold at Rs 80 per score. Find the gain or loss percent.
3. Write the equations and find out the answers.
(a) One - ninth of a number added to one is eleven.
(b) A number multiplied by two is 3 more than the number itself.
(c) Two times the sum of a number x and 3 is 14. 4 .
4. Simplify: (a) $22-1 / 4\{16-(8 \div 4+2)\}$
5. Prabal deposited Rs 5000 in a bank which pays him $5 \frac{1}{2} \%$ interest. After three years he withdraws the money and buys an almirah for Rs 4700 . How much money is left with him?
6. Into how many squares each of side 2 cm can you divide a rectangle of length 8 cm and breadth 4 cm ?
7. The acute angles of a right angle triangle are in the ratio $3: 2$. What is the measures of these acute angles?
8. Fill in the blanks
(a) All the radii of the circle are of $\qquad$ length.
(b) If the radius of the circle is 2 cm , then the length of diameter is $\qquad$ .
(c) Half of the circle is called $\qquad$ .
(d) $\qquad$ is the perimeter of the circle.
(e) $\qquad$ is a line segment whose end points lie on the circle and which passes through the centre of the circle.
9. In the given figure, name the following angles as acute, obtuse, right, straight or reflex. (a) $\angle \mathrm{QOY}$
(b) $\angle \mathrm{YOP}$
(c) $\angle \mathrm{ROX}$
(d) $\angle \mathrm{QOX}$
(e) $\angle P O Q$

10. Complete each of the following, so as to make a true statement:
(a) A $\qquad$ is a rectangle with a pair of adjacent sides equal.
(b) A parallelogram with a pair of adjacent sides equal is called a $\qquad$
(c) A quadrilateral having exactly one pair of parallel sides is called a $\qquad$ .
(d) A quadrilateral having both pairs of opposite sides parallel, is called a $\qquad$
(e) A parallelogram whose each angle is a right angle is called a $\qquad$
$\qquad$
11. Deepak's present age is one-third his mother's present age. If the mother's age was five times his age 6 years ago, what are their present ages?
12. A worker earns Rs 18,000 in 15 months. How much will the work earn in seven months? Also find out, in how many months will he earn Rs 3,600 ?
13. Draw a circle with centre $C$ and radius 3.4 cm . Draw any chord $A B$. Construct the perpendicular bisector of $A B$ and examine, if it passes through $C$.
14. Annual expenditure of a company in the year 2007-29008 is given below :

| Items | Expenditure <br> (Rs in lakh) |
| :--- | :--- |
| Salaries of employees | 65 |
| Advertisement | 10 |
| Purchase of machinery | 85 |
| Electricity and water | 15 |
| Transportation | 25 |
| Other expenses | 30 |

Prepare a pictograph of the above data using an appropriate symbol to represent Rs 10 lakh.
15. Using divisibility test, determine which of the following numbers are divisible by 2 ; by 3 ; by 4 ; by 5 ; by 6 ; by 8 ; by 9 ; by 10 ; by 11 .

| Number | Divisible by |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{8}$ | $\mathbf{9}$ | $\mathbf{1 0}$ | $\mathbf{1 1}$ |  |
| 128 | Yes | No | Yes | No | No | Yes | No | No | No |  |
| 82956 |  |  |  |  |  |  |  |  |  |  |
| 187425 |  |  |  |  |  |  |  |  |  |  |
| 275 |  |  |  |  |  |  |  |  |  |  |
| 53056 |  |  |  |  |  |  |  |  |  |  |
| 76392 |  |  |  |  |  |  |  |  |  |  |
| 17322 |  |  |  |  |  |  |  |  |  |  |

