

- 33.** In a class of 50 students, 8 % were absent on one day. The number of students present on that day was _____.
- 34.** Savitri obtained 440 marks out of 500 in an examination. She secured _____ % marks in the examination.
- 35.** Out of a total deposit of ₹ 1500 in her bank account, Abida withdrew 40% of the deposit. Now the balance in her account is _____.
- 36.** _____ is 50% more than 60.
- 37.** John sells a bat for ₹ 75 and suffers a loss of ₹ 8. The cost price of the bat is _____.
- 38.** If the price of sugar is decreased by 20%, then the new price of 3kg sugar originally costing ₹ 120 will be _____.
- 39.** Mohini bought a cow for ₹ 9000 and sold it at a loss of ₹ 900. The selling price of the cow is _____.

87. Express $16\frac{2}{3}\%$ as a ratio in the lowest form.

88. Express 150% as a ratio in the lowest form.

116. Health Application

A doctor reports blood pressure in millimetres of mercury (mm Hg) as a ratio of systolic blood pressure to diastolic blood pressure (such as 140 over 80). Systolic pressure is measured when the heart beats, and diastolic pressure is measured when it rests. Refer to the table of blood pressure ranges for adults.

Blood Pressure Ranges			
	Normal	Prehypertension	Hypertension (Very High)
Systolic	Under 120 mm Hg	120-139 mm Hg	140 mm Hg and above
Diastolic	Under 80 mm Hg	80-89 mm Hg	90 mm Hg and above

Manohar is a healthy 37 years old man whose blood pressure is in the normal category.

- Calculate an approximate ratio of systolic to diastolic blood pressures in the normal range.
- If Manohar's systolic blood pressure is 102 mm Hg, use the ratio from part (a) to predict his diastolic blood pressure.
- Calculate ratio of average systolic to average diastolic blood pressure in the prehypertension category.

(a) 62.8 cm (b) 31.4 cm (c) 31.4 cm (d) 15.7 cm

22. Area of circular garden with diameter 8 m is

(a) 12.56 m^2 (b) 25.12 m^2 (c) 50.24 m^2 (d) 200.96 m^2

23. Area of a circle with diameter ' m ' radius ' n ' and circumference ' p ' is

(a) $2\pi n$ (b) πm^2 (c) πp^2 (d) πn^2

24. A table top is semicircular in shape with diameter 2.8 m. Area of this table top is

(a) 3.08 m^2 (b) 6.16 m^2 (c) 12.32 m^2 (d) 24.64 m^2

75. The perimeter of a rectangle is 40 m. Its length is four metres less than five times its breadth. Find the area of the rectangle.

- 74.** People of Khejadli village take good care of plants, trees and animals. They say that plants and animals can survive without us, but we can not survive without them. Inspired by her elders Amrita marked some land for her pets (camel and ox) and plants. Find the ratio of the areas kept for animals and plants to the living area.

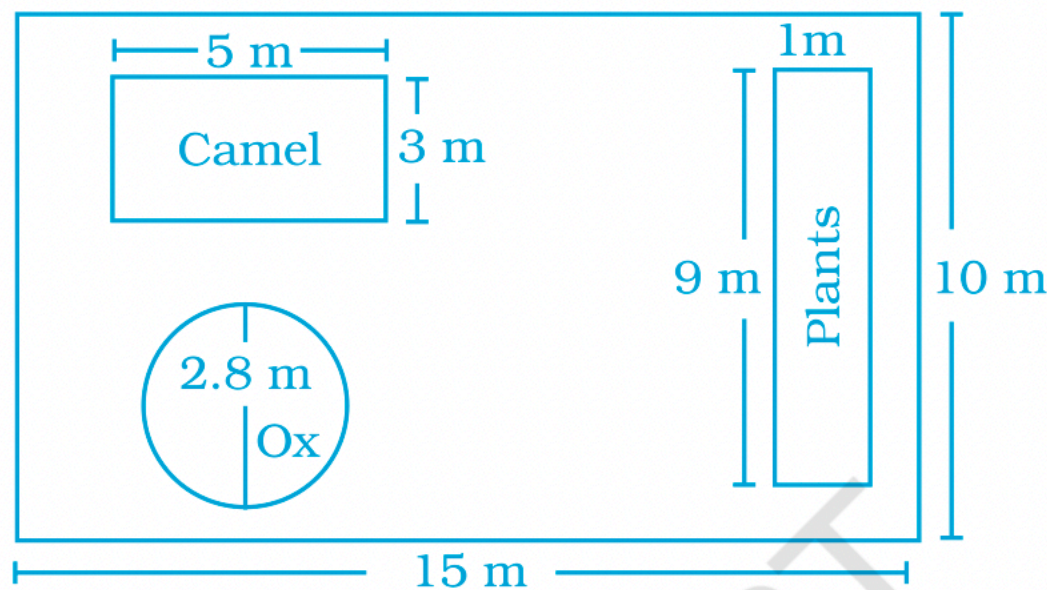


Fig. 9.30

107. Find the total cost of wooden fencing around a circular garden of diameter 28 m, if 1m of fencing costs ₹ 300.

$$m + 2mt + t^2 ?$$

- 61.** How much is $21a^3 - 17a^2$ less than $89a^3 - 64a^2 + 6a + 16$?
- 62.** How much is $y^4 - 12y^2 + y + 14$ greater than $17y^3 + 34y^2 - 51y + 68$?
- 63.** How much does $93p^2 - 55p + 4$ exceed $13p^3 - 5p^2 + 17p - 90$?
- 64.** To what expression must $99x^3 - 33x^2 - 13x - 41$ be added to make the sum zero?