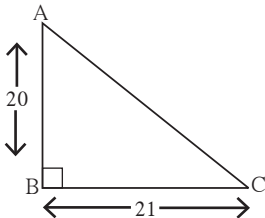


Miscellaneous Problems : Set 2

- Angela deposited 15000 rupees in a bank at a rate of 9 p.c.p.a. She got simple interest amounting to 5400 rupees. For how many years had she deposited the amount?
- Ten men take 4 days to complete the task of tarring a road. How many days would 8 men take?
- Nasruddin and Mahesh invested ₹ 40,000 and ₹ 60,000 respectively to start a business. They made a profit of 30%. How much profit did each of them make?
- The diameter of a circle is 5.6 cm. Find its circumference.
- Expand.
(i) $(2a - 3b)^2$ (ii) $(10 + y)^2$ (iii) $\left(\frac{p}{3} + \frac{q}{4}\right)^2$ (iv) $\left(y - \frac{3}{y}\right)^2$
- Use a formula to multiply.
(i) $(x - 5)(x + 5)$ (ii) $(2a - 13)(2a + 13)$
(iii) $(4z - 5y)(4z + 5y)$ (iv) $(2t - 5)(2t + 5)$
- The diameter of the wheel of a cart is 1.05 m. How much distance will the cart cover in 1000 rotations of the wheel?
- The area of a rectangular garden of length 40 m, is 1000 sqm. Find the breadth of the garden and its perimeter. The garden is to be enclosed by 3 rounds of fencing, leaving an entrance of 4 m. Find the cost of fencing the garden at a rate of 250 rupees per metre.
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From the given figure, find the length of hypotenuse AC and the perimeter of $\triangle ABC$.
- If the edge of a cube is 8 cm long, find its total surface area.
- Factorise. $365y^4z^3 - 146y^2z^4$

Multiple Choice Questions

Choose the right answers from the options given for each of the following questions.

- If the average of the numbers 33, 34, 35, x , 37, 38, 39 is 36, what is the value of x ?
(i) 40 (ii) 32 (iii) 42 (iv) 36
- The difference of the squares, $(61^2 - 51^2)$ is equal to
(i) 1120 (ii) 1230 (iii) 1240 (iv) 1250
- If 2600 rupees are divided between Sameer and Smita in the proportion 8 : 5, the share of each is and respectively.
(i) ₹ 1500, ₹ 1100 (ii) ₹ 1300, ₹ 900
(iii) ₹ 800, ₹ 500 (iv) ₹ 1600, ₹ 1000