Revision Exercise - 2

(1) (i) Find the value of 6.785×1000.

(ii) Simplify $3\frac{1}{3} - 1\frac{1}{4}$.

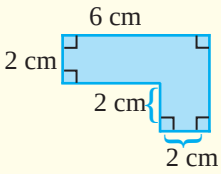
(iii) Find the value of $2a + 5$, if $a = 4$.

(iv) Express 5.075 g, in grammes and milligrammes.

(v) Solve $2x + 5 = 7$.

(vi) Simplify 96 cm 6 mm $\div$ 7.

(vii) Find the area of the given figure.

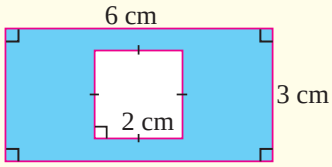


(viii) Find the volume of a cube of side length 5 cm.

(ix) Write $1\frac{5}{7}$ as an improper fraction.

(x) Write $\frac{17}{5}$ as a mixed number.

(xi) Find the area of the shaded region.



(xii) Find the side length of a square land of perimeter 22 m.

(xiii) Find the breadth of a rectangular land of area 24 m^2 and length 8 m.

(2) (a) Fill in the blanks using $<$ or $>$ appropriately.

(i) $\frac{3}{4}$ ..... $\frac{1}{4}$ (ii) $\frac{1}{4}$ ..... $\frac{5}{12}$ (iii) $3\frac{5}{8}$ ..... $3\frac{1}{3}$

(b) Simplify the following.

(i) $3\frac{5}{12} + \frac{7}{12}$ (ii) $2\frac{2}{7} + \frac{9}{14}$ (iii) $2\frac{5}{8} - 1\frac{1}{8}$ (iv) $3\frac{7}{8} - 2\frac{2}{3}$

(c) Dileepa and Sithumina sat for a multiple choice question paper. From the total number of questions, Dileepa answered $\frac{5}{8}$ correctly and Sithumina answered $\frac{3}{4}$ correctly. Who answered more questions correctly? Give reasons for your answer.

(d) In a test, Rahuman received 0.36 of the total marks and Rahuldev received $\frac{9}{25}$ of the total marks. Show that Rahuman and Rahuldev received the same amount of marks.

(3) (a) Convert the following fractions and mixed numbers into decimals.

(i) $\frac{648}{1000}$ (ii) $\frac{6}{20}$ (iii) $\frac{7}{8}$ (iv) $2\frac{1}{4}$

(b) Simplify.

(i) 0.875×100 (ii) 3.25×6 (iii) 0.005×22

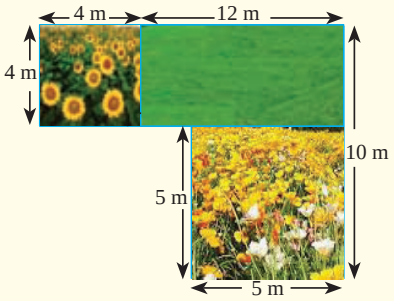
(iv) $127.5 \div 10$ (v) 24.68×8 (vi) $13.75 \div 1000$

(4) The given figure shows a home garden.

(i) Find the perimeter of the garden.

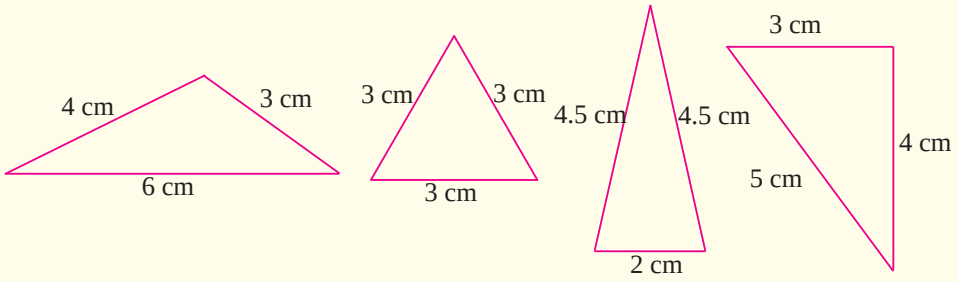
(ii) Find the area of the garden where flowers are grown.

(iii) Find the total area of the garden.



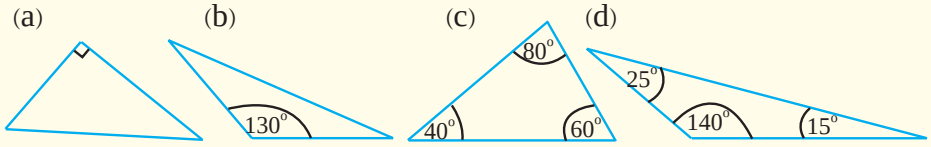
(5) (i) Each of the following triangles state whether it is an equilateral triangle, an isosceles triangle or a scalene triangle.

(a) (b) (c) (d)

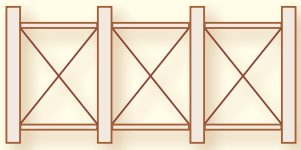


(ii) Each of the following triangles state whether it is an acute angled triangle, a right angled triangle or an obtuse angled triangle.

(a) (b) (c) (d)



(6) The gate shown in the figure has 4 vertical posts. Each is of height 1.75 m.



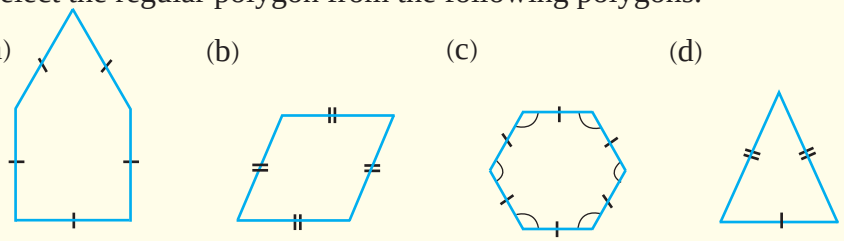
(i) If the posts are made from a metal pipe, find the total length of the pipe.

(ii) The total length of the metal bar used to cut the 6 horizontal bars was 8.4 m. Find the length of one horizontal bar.

(7) (a) (i) Draw a concave polygon with 1 reflex angle and 6 sides.

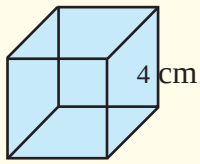
(ii) Select the regular polygon from the following polygons.

(a) (b) (c) (d)



(8) (a) (i) Find the volume of the given cube.

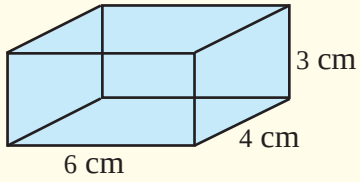
(ii) Calculate the volume of a cube of length twice the length of the above given cube.



(b) A cuboid is shown in the figure.

(i) Find the volume of this cuboid.

(ii) What is the height of a cuboid of volume 96 cm^3, if its length and breadth are the same as those of the cuboid shown in the figure?



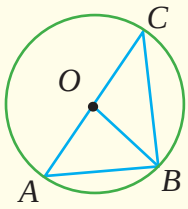
(9) *O* is the centre of the circle in the figure. *AC* is a straight line.

(i) What is the special name given to *AC* ?

(ii) What is the special name given to the length *OB* ?

(iii) Name two isosceles triangles in the figure.

(iv) If *AB* = 6 cm, *BC* = 8 cm and the radius of the circle is 5 cm, find the perimeter of each of the triangles *OBC*, *AOB* and *ACB*.



(10) Information on the quantities of milk bought by three households during a week from a milkman is given below.

(i) Household *A* buys 1*l* 500 ml of milk per day on all seven days of the week. Find the total quantity of milk that household *A* buys during a week.

(ii) Household *B* buys the same amount of milk on each of the seven days of a week. The total amount of milk household *B* buys during a week is 12 *l* 250 ml. Find the amount of milk household *B* buys per day.

(iii) Find the total quantity of milk bought during a week by household *C*, if 7 *l* 500 ml of milk in total is bought during the five week days and 2 *l* 750 ml of milk in total is bought on Saturday and Sunday.

(iv) During the school holidays, the milkman is asked to deliver 250 ml more milk per week than the normal amount he delivers. If an equal amount of milk is delivered each day, find the amount he delivers to household *C* per day during the holidays.

(11) A certain brand of biscuits is introduced to the market in packets.

(i) The mass of a biscuit is 8 g 250 mg. If a packet contains 25 biscuits, find the total mass of the biscuits in a packet.

(ii) The mass of the empty packet is 760 mg. Find the total mass of a packet of biscuits.

(iii) 12 such packets of biscuits are packed in a box of mass 40 g, and such boxes containing packets of biscuits are distributed to wholesale dealers. Find the total mass of one such box that is bought by a wholesale dealer.

(12) (a) (i) Solve $9x + 7 = 97$.

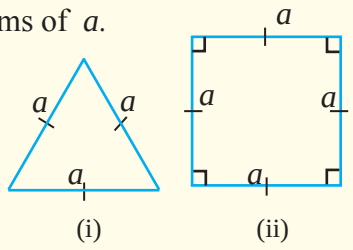
(ii) When Nimal gave Rs. 200 to buy 8 books, he received a balance of Rs. 40. Construct an equation using this information, by taking the price of a book to be Rs. x. Find the price of a book.

(b) The figure shows two frames in the shape of rectilinear plane figures, which have been made using ekels of equal length. The length of one ekel is a cm.

(i) Find the perimeter of the first figure in terms of a.

(ii) Find the perimeter of the second figure in terms of a.

(iii) If the total length of the ekels used to make these two frames is 42 cm, construct an equation in terms of a. Solve it and find the value of a.



(i) (ii)

(13) The cost of printing the cover of a certain book is Rs. y while the cost of printing a page of the book is Rs. p.

(i) If the book has 45 pages, and it costs Rs. c to print one copy of it, construct a formula for c in terms of p and y.

(ii) If the cost of printing the book is Rs. 115, and the cost of printing the cover is Rs. 25, find in rupees, the cost p of printing a page of this book.

(14) Two athletes train on two days of the week. The distances run on the two days are given below.

Day	Shanuka	Kavindu
Monday	2 km 800 m	1 km 200 m
Tuesday	4 km 400 m	3 km 800 m

(i) Who runs a longer distance during the training period of two days?

(ii) How much further does Shanuka run on Tuesday than on Monday?

(iii) On Tuesday, how much further does Shanuka run than Kavindu?

(iv) What is the total distance run by Shanuka during 4 weeks of such training?