Provincial Department of Education Sabaragamuwa – week school

Subject:- Mathematics

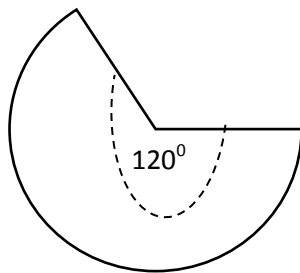**Week-13**

Grade:-10

Translated by – H.K.L.M.Rathnayake
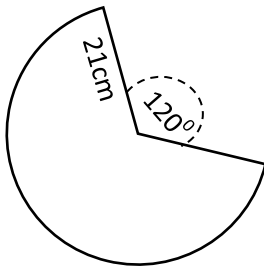
Ke/Dehi/Thalduwa Buddhist College

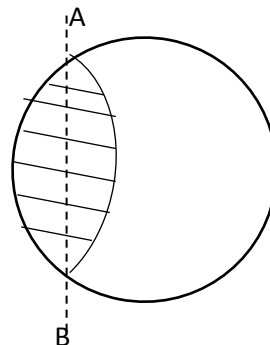# First Term – Revision Exercise 1

Perimeter

1. The arc length of the sector in the figure is 44 cm. Find the radius of the corresponding circle (radius of the sector).
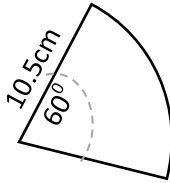

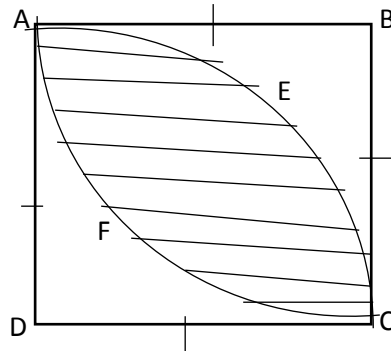2. Find the arc length of the sector with radius 21cm.

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3. Shaded region has been cut out from a circle of radius 14cm. Find the perimeter of the remaining part (line AB is the axis of symmetry).

4. If you want to wrap a ribbon around a sector shaped ornament with a radius 10.5 cm, find the required length of the ribbon.

5. The figure shows two sectors AECD and AFCB. Find the perimeter of the shaded region using the given data (AB = 10.5 cm).

Fractions

6. Simplify.

a) $\left(6\frac{3}{8} - \frac{1}{4}\right) of \frac{1}{7}$

b) $2\frac{2}{3}\left(1\frac{1}{4} - \frac{1}{12}\right) \div 2\frac{1}{3}$

c) $\frac{2}{3} x \frac{3}{4} of \frac{5}{6} \div \frac{7}{18}$

d) $\left(\frac{2}{3} - \frac{1}{2}\right) of \left(\frac{7}{5} \div 2\frac{1}{3}\right)$

7. Thamara, a self-employed person, buys a stock of 1kg of discarded clothes in a garment factory for Rs.100. $\frac{2}{5}$ of that stock was used to sew children's clothes and the remaining $\frac{1}{3}$ was used to sew pillows and shoulders.

a) What fraction of the total material is remaining after sewing children's clothes?

b) What fraction of the total material used for sewing pillows?

 c) If the remaining amount of material after sewing children's clothes and pillows was used for sewing carpets, what is the fraction of the total material?

 d) If the size of the material used for carpet sewing is 20 kg, what is the total amount of material she bought?

 e) Tamara earned Rs.17,400 by sewing children's clothes, pillows and carpets and spent Rs. 5,000 on sewing rent, what is the profit she earned from this self-employment?

8. A certain school received some money from a foreign country. $\frac{2}{7}$ of money was spent on furniture. $\frac{1}{4}$ of money used to buy books.

a) How much of the money was spent on furniture and books?

b) $\frac{4}{13}$ of the balance was spent on gift purchases. The rest was used to renovate the building. What half of the total money was spent on buying gifts?

c) What half of the total money was spent on the renovation of the building?

d)) If the money spent on the renovation of the building is Rs.180 000, find the total money received from a foreign country.

Square Root

9. Find the value of first approximation .
- a) $\sqrt{28}$
  $5.1 * 5.1 = 26.01$
  $5.2 * 5.2 = 27.04$
  $5.3 * 5.3 = 28.09$
  $5.4 * 5.4 = 29.16$

- b) $\sqrt{17}$
- c) $\sqrt{33}$

10. Find the square root to the first decimal place by the division method.
- a) 1764
- b) 352
- c) 2059