



Al Sharq Bright International School
Model Paper for Final Exam 2017-2018

Name: _____ **Subject:** Mathematics **Class:** 7_____ **Date:** _____

Part – 1

A. Fill in the blanks:

- 1) _____ has no units.
- 2) If the cost of one book is 5SR, the cost of 12 books is _____.
- 3) Percentages are fractions with denominator equal to _____.
- 4) $1.153 =$ _____%
- 5) Required % = $\frac{\text{First quantity}}{\text{second quantity}} \times$ _____
- 6) Overhead charges are always added to _____.
- 7) Two angles are said to be supplementary if the sum of their measures is _____.
- 8) Two adjacent _____ angles form a linear pair.
- 9) The straight line that joins a vertex of the triangle with the midpoint of the side opposite to it is called _____ of the triangle.
- 10) Sum of any two sides of the triangle is _____ than the third side.

B. Write whether true or false:

- 1) By Pythagoras theorem the length of the hypotenuse = sum of the other two sides.

- 2) One of the angle of a right angled triangle is always 45° . _____

- 3) Vertically opposite angles are always equal. _____
- 4) The parallel lines never meet. _____
- 5) The complimentary angle of 75° is 10° _____
- 6) When a transversal cuts two parallel lines the alternate angles are always equal. _____
- 7) If CP = 200, SP= 230, Profit = 30 _____
- 8) 65% of 650 mangoes = 10 mangoes _____

C. Choose the correct answer:

- 1) The decimal for 10%
a) 1.0 b) 0.01 c) 0.1
- 2) To convert fraction to percentage, multiply by _____
a) 50% b) 100% c) 25%
- 3) The ratio of 5 oranges to 10 mangoes
a) 1:2 b) 10:5 c) 5:1
- 4) 90:150 can be written in the simplest form as
a) 45:75 b) 9:15 c) 3:5
- 5) A ray is a part of a _____
a) line segment b) line c) angle
- 6) Angle at a point is _____
a) 360° b) 90° c) 180°
- 7) Two _____ supplementary angles form a linear pair.
a) adjacent b) opposite c) exterior
- 8) The measure of the angle whose supplement is 102°
a) 86° b) 90° c) 78°

Part – 2

D. Solve the following questions:

1) A dozen apples weigh 2.4kg. How many apples will weigh 10.2kg?

2) 5% sales tax on a sale is 2SR. What is the amount of sale?

E. Find the third side:

1) In a ΔABC , $\angle C$ is a right angle, 'AC' and 'BC' are the sides and 'AB' the hypotenuse. Find the third side?

a) $AC=5$, $AB= 13$, BC ?

b) $AC= 12$, $BC= 9$, $AB =?$

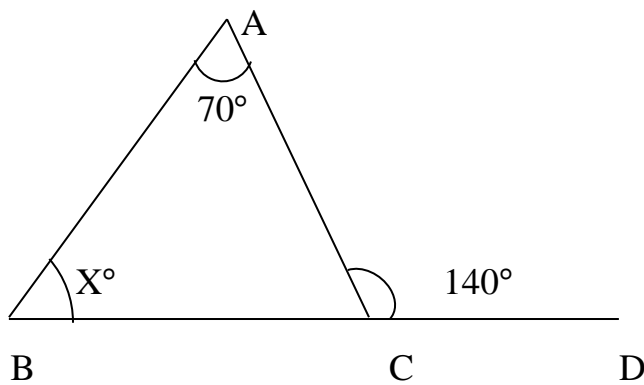
F. Solve:

1) Hameed buys a cycle for 1700 SR and sells at 1870SR. What is his profit percentage?

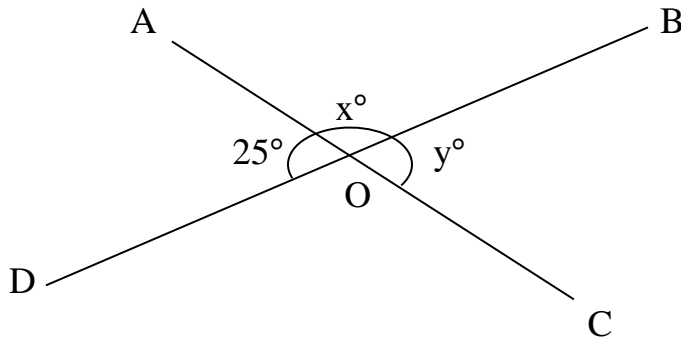
2) In a right angled triangle, two acute angles are in the ratio 2:3, what are their measures?

G. Find the value of 'x' and 'y' in the given figures below:

1)



2)



Find $\angle AOB$ and $\angle BOC$?

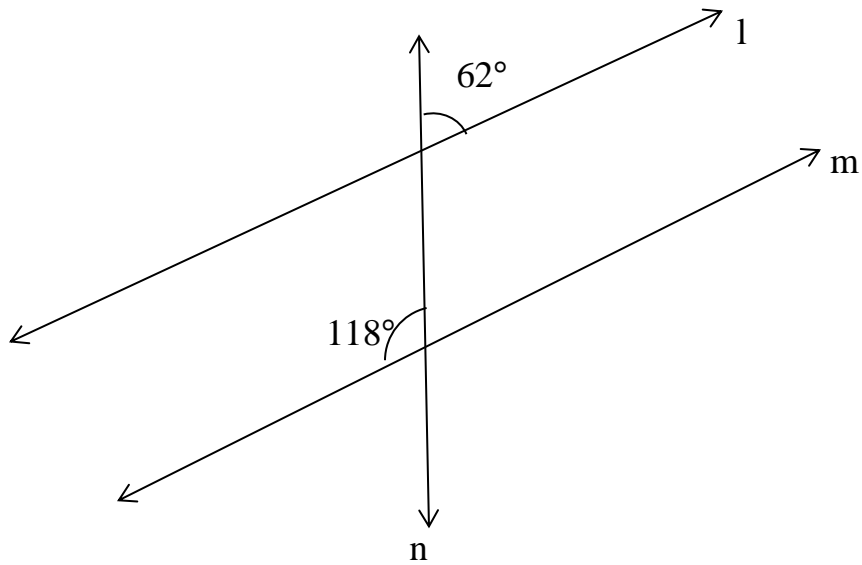
Part – 3

H. Solve:

1) The sides of a rectangle are 12m and 5m. What is the length of the diagonal?

2) Jones buys a camera for 1100SR and then gets some repairs done for 100SR. Since he was in need of money he had to sell it for 840SR. What is his loss per cent?

3) In the figure lines l and m are intersected by a transversal n . The measure of two angles are given in the figure. Is $l \parallel m$? Give reasons for your answer:



I. Find out which of the following are triangles? Write the reasons:

1) $\angle A = 60^\circ$ $\angle B = 60^\circ$ $\angle C = 90^\circ$

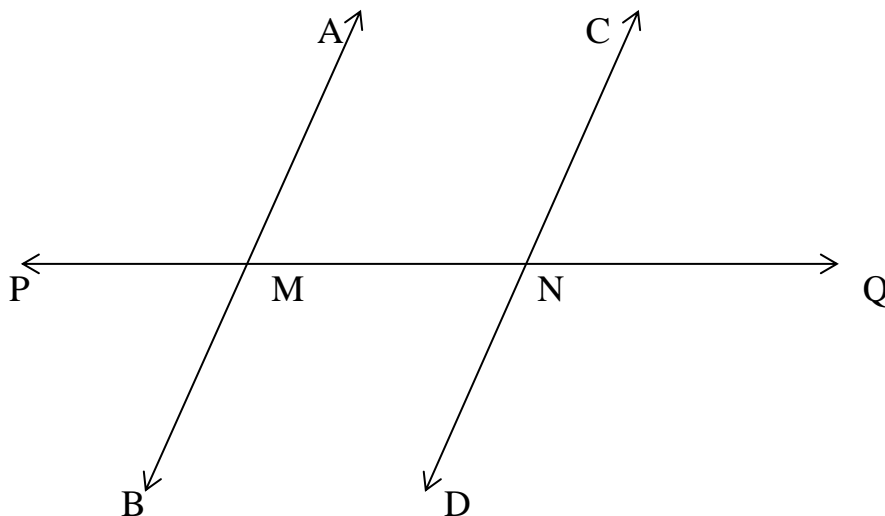
2) $\overline{AB} = 25$ cm, $\overline{BC} = 20$ cm, $\overline{AC} = 15$ cm

J. Solve:

1) In 3 hours, a train covers 195 km. Travelling at the same speed, what distance would the train cover in 5 hours?

2) 40% of the population of a town are men, 35% are women, and the remaining are children. If the number of children is 28000, what is the total population of the town?

K. Name the required angles from the figure:



- 1) The vertically opposite angle of $\angle AMN =$ _____
- 2) The adjacent angle of $\angle CNQ =$ _____
- 3) The alternate angle of $\angle PMB =$ _____
- 4) The corresponding angle of $\angle CNQ =$ _____

Part – 4

L. Mental Maths:

- 1) $10.53 =$ _____ %
- 2) The equivalent ratio of $3:4 =$ _____
- 3) Profit = _____
- 4) The sum of linear pair angles = _____

Note: This is just a model, not the exam paper.