

TEST PAPER: MATHEMATICS

Time: 50 Minutes Class: 8th I.C.S.E.

Max. Marks: 30 Marks Date: 12th September, 2018

Marking Scheme: Three questions carry 10 marks each. Questions have 3 subparts each. Subparts (a) and (b) carry 3 marks each and subpart (c) carries 4 marks.

Question 1:

a. Factorise by regrouping

(i)
$$(x-2)^2 - (x-3)^2$$

(ii)
$$xy - pq + qy - px$$

b. Factorise:

(i)
$$4x^2 + 12xy + 9y^2$$

(ii)
$$x^2 + 6x + 8$$

c. The length of a rectangle is twice its breadth. If the perimeter is 72 metre, find the length and breadth of the rectangle.

Question 2:

- a. The sum of two consecutive multiples of 5 is 55. Find these multiples.
- b. Find the sum of interior angles of a decagon.
- c. Solve the following equations:

(i)
$$5(y-1) = 3(2y-5) - (1-3y)$$

(ii)
$$2(x-1) - 6x = 10 - 2(x-4)$$

Question 3:

- a. Two angles of a quadrilateral measure 85° and 75° respectively. The other two angles equal. Find the measure of each of these equal angles.
- c. Aaron is 5 years younger than Ron. Four years later, Ron will be twice as old as Aaron. Find their present ages.