



# TEST PAPER: MATHEMATICS

Time: 50 Minutes

Class: 9<sup>th</sup> C.B.S.E.

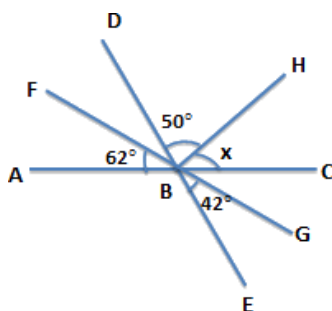
Max. Marks: 30 Marks

Date: 6<sup>th</sup> June, 2018

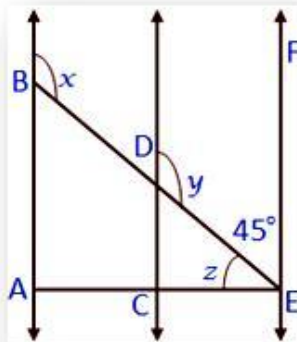
**Marking Scheme:** Three questions carry 10 marks each. Questions have 3 subparts each. Subparts (a) and (b) carry 3 marks each and subpart (c) carries 4 marks.

## Question 1:

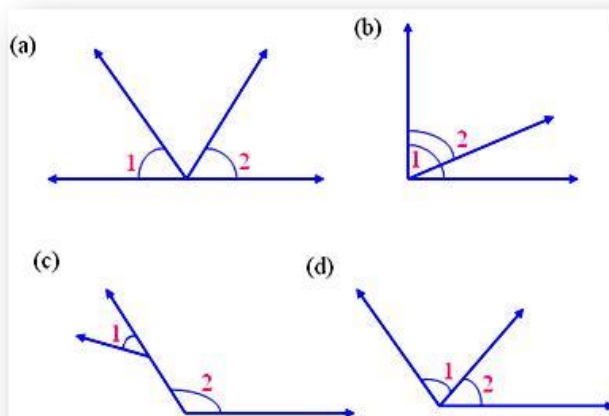
- a. In the figure below, AC, DE, FG are straight lines. Find x.



- b. In the given figure  $AB \parallel CD \parallel EF$  and  $AE \perp AB$ . Also,  $\angle BAE = 90^\circ$ . Find the values of  $\angle x$ ,  $\angle y$  and  $\angle z$ .

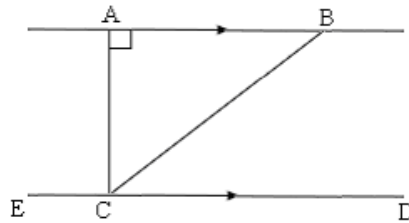


- c. State whether the following angles adjacent. If no, give reason(s).

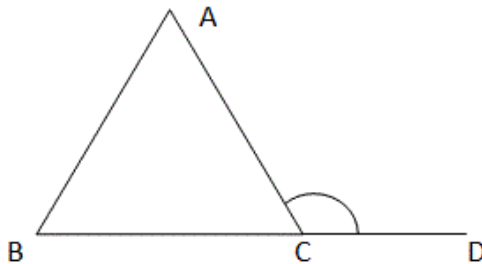


**Question 2:**

- a. In the given figure,  $AB \parallel CD$  and  $\angle ECB = 140^\circ$ , find  $\angle ABC$ .



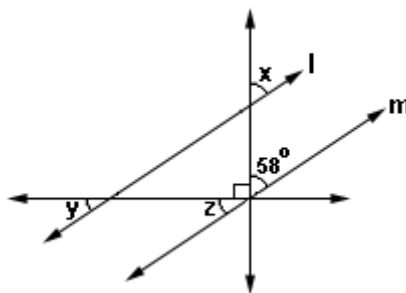
- b. In the given figure,  $\triangle ABC$  is an isosceles triangle with  $AB = BC$ . Also,  $\angle ACD = 126^\circ$ . Find  $\angle A$ .



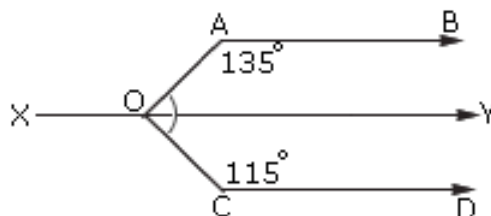
- c. Draw the graph of the following linear equation in two variables:  $x + 2y = 12$

**Question 3:**

- a.  $l$  and  $m$  are parallel lines in the figure. What are the measures of  $\angle x$ ,  $\angle y$  and  $\angle z$ ?



- b. Find the measure of  $\angle AOC$  if  $AB \parallel CD \parallel XY$ ,  $\angle BAO = 135^\circ$  and  $\angle OCD = 115^\circ$ .



- c. In the given figure,  $AB \parallel DE$ , find  $\angle BCD$ . **Hint: Solve by using suitable constructions of lines parallel to AB.**

