



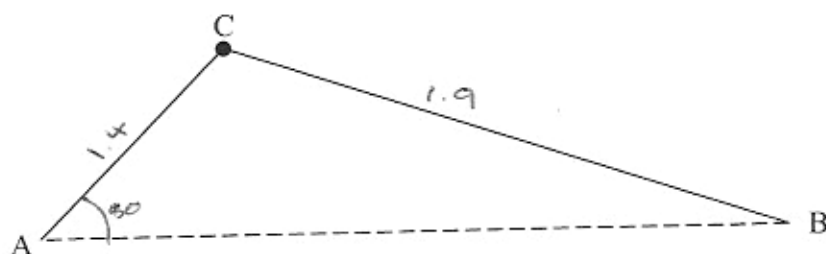
QUESTION TWO

- (a) Factorise $x^2 - x - 2$

Hence express $\frac{2x}{x^2 - x - 2}$ in partial fractions.

(6 marks)

- (b) The figure shows a robot at C moving an object from A to B. Lengths AC = 1.4m, BC = 1.9m and angle A is 50° . Find the distance the robot moves the object.



(10 marks)

- (c) Solve the following equations for x , giving all the values of x between 0° and 360° .

(i) $\tan 2x = -1$

(ii) $3 \cos^2 x - \sin^2 x = 1$

(9 marks)