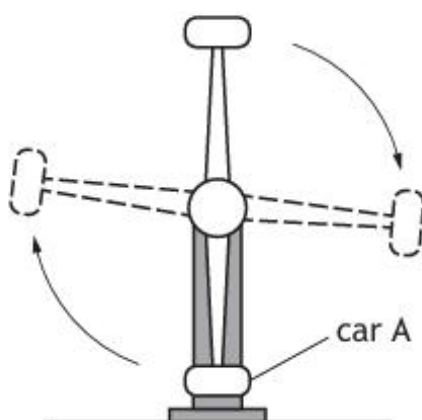


A ride at a theme park has a car attached to each end of a rotating arm.



The starting position of car A is shown in the diagram.



As the arm rotates clockwise, the height, h metres, of car A above the ground in each rotation is given by

$$h = 10 - 8 \cos x^\circ, \quad 0 \leq x < 360$$

where x° is the angle the arm has turned from car A's starting position.

Calculate the **two** values of x for which the height of car A is 13 metres above the ground.

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Answer: $x = 112.0^\circ$ and $x = 248.0^\circ$