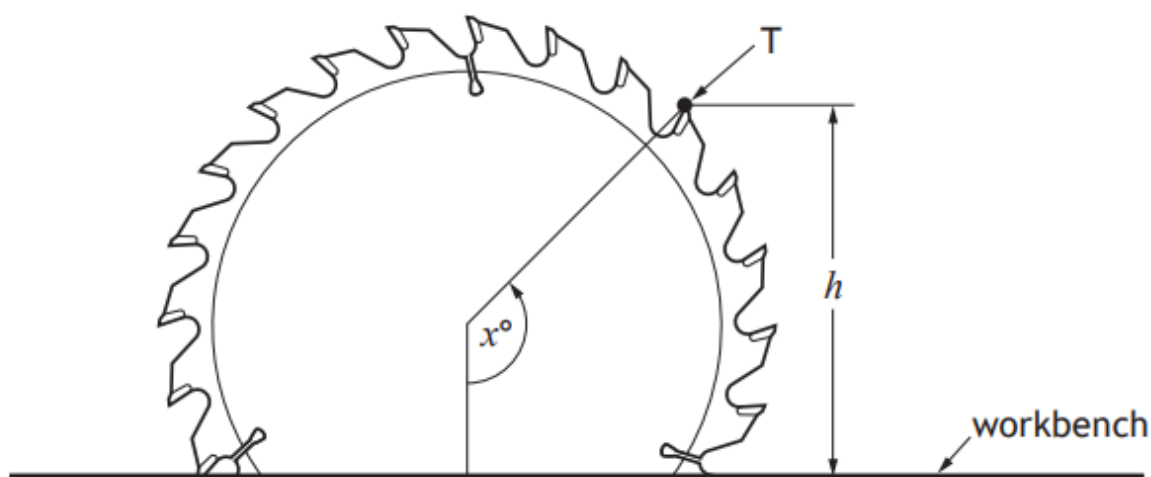




The diagram shows the part of the blade of a circular saw above a workbench.



As the blade rotates, the height,  $h$  millimetres, of point T above the workbench is given by

$$h = 57 - 85 \cos x^\circ$$

where  $x$  is the angle the blade has turned anti-clockwise from a starting position.

- (a) Calculate the value of  $x$  when point T is first at a height of 115 millimetres above the workbench. 3
- (b) Calculate the value of  $x$  when point T is next at this height. 1

Answers:

- (a)  $133.0^\circ$   
(b)  $227.0^\circ$