

1 A particle is following a circular path and is observed to have an angular displacement of 10.3° .

(a) Express this angle in radians (rad). Show your working and give your answer to three significant figures.

angle =rad [2]

(b) (i) Determine $\tan 10.3^\circ$ to three significant figures.

$\tan 10.3^\circ =$

(ii) Hence calculate the percentage error that is made when the angle 10.3° , as measured in radians, is assumed to be equal to $\tan 10.3^\circ$.

percentage error =
[3]