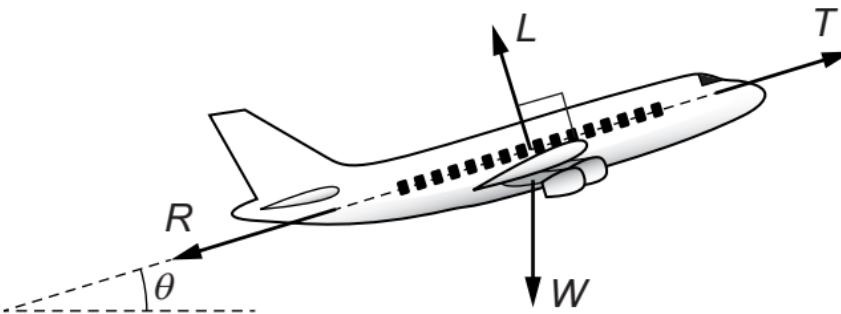


- 4 An aeroplane is moving at a constant speed in a straight line at an angle  $\theta$  to the horizontal.

Four forces act on the aeroplane: thrust force  $T$ , weight  $W$ , lift force  $L$  and resistive force  $R$ .



Which two equations must be correct?

- A  $L = W \cos \theta$  and  $T = R + W \sin \theta$
- B  $L = W \sin \theta$  and  $T = R + W \cos \theta$
- C  $L = W \cos \theta$  and  $T = R - W \sin \theta$
- D  $L = W \sin \theta$  and  $T = R - W \cos \theta$

- 5 What is the definition of acceleration?