

1. 0625/42/F/M/19/No.3

(a) An object is moving in a straight line at constant speed.

State **three** ways in which a force may change the motion of the object.

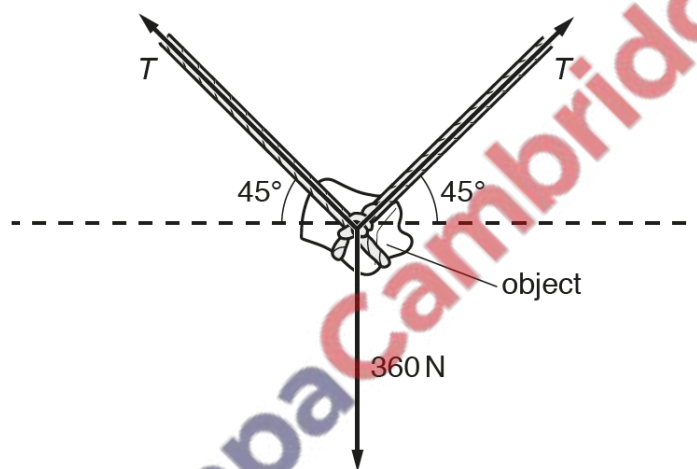
1 .....

2 .....

3 .....

[2]

(b) Fig. 3.1 shows an object suspended from two ropes. The weight of the object is 360 N. The magnitude of the tension in each rope is  $T$ .



**Fig. 3.1**

In the space below, determine the tension  $T$  by drawing a vector diagram of the forces acting on the object.

State the scale you have used.

scale .....

$T =$  .....

[5]