

A particle  $P$  is projected vertically upwards from horizontal ground with speed  $u \text{ m s}^{-1}$ .  $P$  reaches a maximum height of 20 m above the ground.

- (a) Find the value of  $u$ . [2]

[illegible]

- (b) Find the total time for which  $P$  is at least 15 m above the ground. [3]

[illegible]