A particle P is projected vertically upwards from horizontal ground. P reaches a maximum height of 45 m. After reaching the ground, P comes to rest without rebounding.

(a)	Find the speed at which $P$ was projected.	[2]
<b>(b)</b>	Find the total time for which the speed of $P$ is at least $10 \mathrm{m  s}^{-1}$ .	[3]