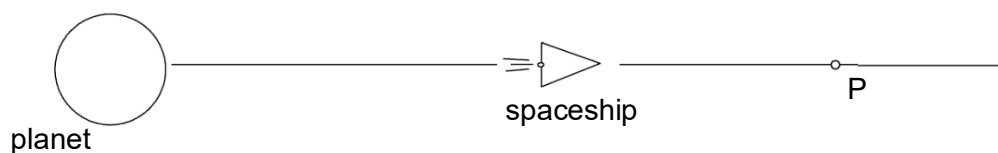


- 10 A powered spaceship is moving directly away from a planet as shown below.



The spaceship passes point P at  $t = 0$ . At point P, the thrusters of the spaceship are switched off but the spaceship remains under the influence of the planet. Which one of the following graphs best represents the subsequent variation with time  $t$  of the velocity  $v$  of the spaceship?

