

(3)

- (5). a jetski purchased for \$19,995 can be modeled by the equation

$$V = P(0.993)^t$$

where  $P$  is the purchase price.

$t$  is the number of hours used.

After how many hours of use would the jetski be worth  $\frac{2}{3}$  of its original price?

- (6) an aeroplane can cover a distance of 5000 km over  $t$  hours at a velocity  $v = \frac{5000}{t}$

If the same plane flew 5000 km again increasing its speed by 250 kph ( $v+250$ ) and cutting the travelling time by 1 hour ( $t-1$ ), what would its speed have been in both instances.