Acceleration Practice.

$$a = \frac{v - u}{t}$$

$$a = \frac{\Delta v}{\Delta t}$$

Calculate the acceleration in each of these situations.

1.
Car sets off from rest and reaches a speed of 8 m s-1 in a time of 2 s

2.
A skier has an initial speed of 2 ms^{-1} 4 seconds later her speed is now 6 m s^{-1}

3.
A rocket changes its speed from 100 m s^{-1} to 300 m s^{-1} in a time of 40 seconds.

4.
A ball sitting at rest is kicked and the speed 0.8 seconds later is 15 m s^{-1}

5.
A rock falls of a mountain from rest. After 2 seconds it has a speed of 20 m s^{-1}

6.
A cyclist changes his speed from 2.5 m s^{-1} to 4.5 m s^{-1} in a time of 5 s