**Motion in Two Dimensions**

Force and Acceleration can be represented as both scalars and vectors. Therefore Newton's 2nd law can be used in vector form too.

This naturally means that works with vectors too.

**Example**

Forces , and and act on a particle of mass 2kg. Find the acceleration of the particle. Find also the magnitude and the bearing of the acceleration.

**Example – Using SUVAT Equations**

A constant force N acts on a particle of mass 5kg for 8 seconds. The particle is initially at rest and 8 seconds later it has velocity ms-1. Find .

**Test Your Understanding** *(Textbook)*

A boat is modelled as a particle of mass 60 kg being acted on by three forces.

Given that the boat is accelerating at a rate of ms-2, find the values of and .

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