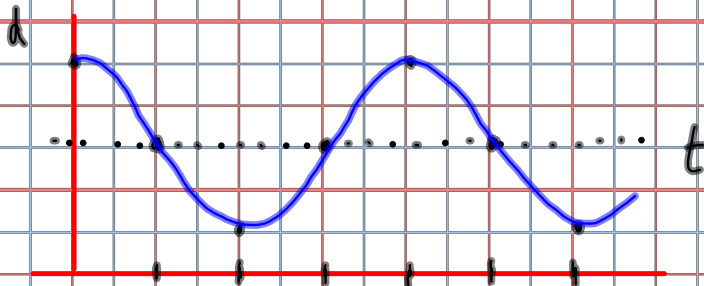
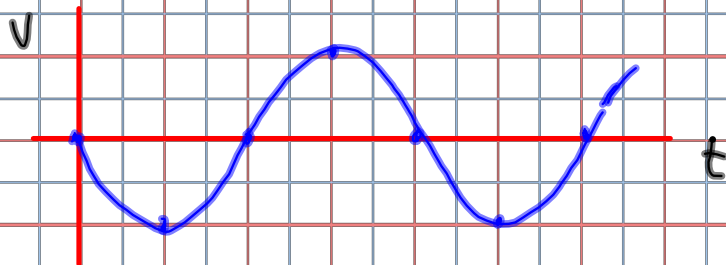
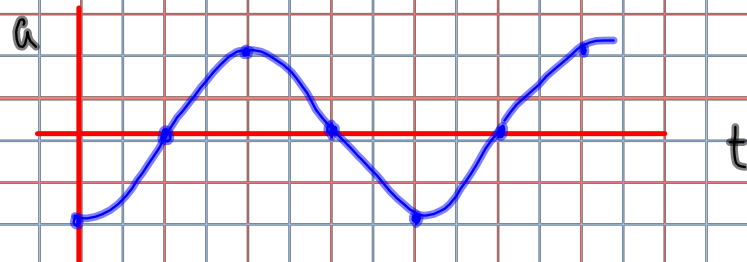
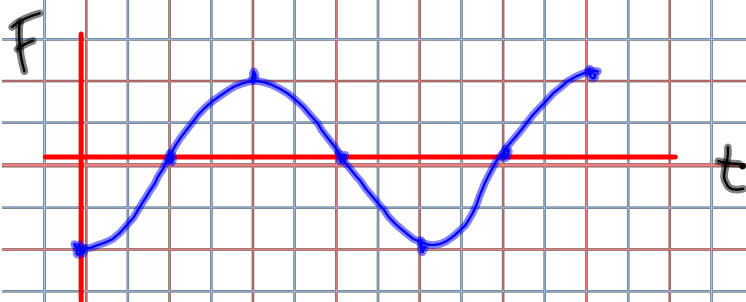


## Graphs of Simple Harmonic Motion

 $\cos t$  $-\sin t$  $-\cos t$ 

## Period of a mass on a spring

$$T = 2\pi \sqrt{\frac{m}{k}}$$

Recall: Hooke's Law ( $F = -kx$ )

$$F_a = kx$$

Where  $F_a$  is the applied force (N)  
 $k$  is the spring constant (N/m)  
 $x$  is the stretch (+) / compression (-) (m)

## Period of a Pendulum

$$T = 2\pi \sqrt{\frac{l}{g}}$$

### TO DO

- ① Read over MP/606
- ② PP/608
- ③ Read over MP/613
- ④ PP/614

\* note  $T = 0.775s$  not  $15.5s$  as is in solution.