

FORMULA SHEET FOR COMPREHENSIVE EXAM

1) Speed= Distance/Time

measured in m/s

Using a D-T graph: Pick the **First and the last** points

X,Y
(60,300)
(120, 600)
t,d
$$\frac{600-300}{120-60} = \frac{300}{60} = 5 \text{ m/s}$$

2) Acceleration= $\frac{V_f - V_i}{t}$

measured in m/s^2

3) Newton's Second Law of Motion $F=ma$

4) Momentum $p=mv$

5) Work $W=Fd$

6) Power $P=W/t$

7) Pressure $P=F/A$

** relate to Hydraulic lifts **

8) Density $D=m/V$

measured in g/cm^3

9) Celsius to Fahrenheit

10) Fahrenheit to Celsius

What are the following measured in?

Energy- _____

Distance- _____

Force- _____

Mass- _____

Work- _____

Power- _____

Pressure- _____