



## PRACTICE MAKES PERFECT

### OBJECTIVE Qs

#### 1.1 PHYSICAL QUANTITIES

##### 1. SPM 2003/1

Which physical quantity has the correct S.I units?  
*Kuantiti fizikal manakah mempunyai unit SI yang betul?*

	Physical quantity/ <i>Kuantiti fizikal</i>	S.I unit <i>Unit SI</i>
A	Temperature <i>Suhu</i>	Celsius <i>Celcius</i>
B	Time <i>Masa</i>	Minute <i>Minit</i>
C	Mass <i>Jisim</i>	Newton <i>Newton</i>
D	Length <i>Panjang</i>	Meter <i>Meter</i>

##### 2. SPM 2005 / 3

The relationship between stretching force, F with the extension, x of a spring is given by the equation:

*Hubungan antara daya regangan,F dengan pemanjangan, x bagi spring diberikan oleh persamaan :*

$$F = kx$$

where k is the spring constant.  
*dimana k ialah pemalar spring.*

What is the unit of k?

*Apakah unit bagi k?*

- A Nm<sup>-1</sup>
- B Nm<sup>-2</sup>
- C kg Nm<sup>-1</sup>
- D kg Nm<sup>-2</sup>

##### 3. SPM 2006/1

Which of the following physical quantities is **not** a base quantity?

*Manakah antara kuantiti fizikal berikut bukan kuantiti asas?*

- A Weight / *Berat*
- B Time / *Masa*
- C Temperature / *Suhu*
- D Electric current / *Arus elektrik*

##### 4. SPM 2013/1

Which pair of physics quantity and SI unit is correct?

*Pasangan kuantiti fizik dan unit SI manakah yang betul?*

#### Physics quantity

#### *Kuantiti fizik*

- A Electric current  
*Arus elektrik*
- B Pressure  
*Tekanan*
- C Weight  
*Berat*
- D Force  
*Daya*

#### SI unit

#### *Unit SI*

- Ampere  
*Ampere*
- Newton  
*Newton*
- Kilogramme  
*kilogram*
- Joule  
*Joule*

##### 5. SPM 2014/1

Which quantity is base quantity?

*Kuantiti manakah adalah kuantiti asas?*

- A Potential difference / *Beza keupayaan*
- B Electric current / *Arus elektrik*
- C Electric energy / *Tenaga elektrik*
- D Electric power / *Kuasa elektrik*

##### 6. SPM 2015/1

Which of the following SI units is correct for each quantity?

*Unit SI manakah yang betul bagi setiap kuantiti?*

	Quantity <i>Kuantiti</i>	SI unit <i>Unit SI</i>
A	Mass <i>Jisim</i>	Gram (g) <i>Gram (g)</i>
B	Time <i>Masa</i>	Minute (min) <i>Minit (min)</i>
C	Length <i>Panjang</i>	Centimetre (cm) <i>Sentimeter (cm)</i>
D	Temperature <i>Suhu</i>	Kelvin (K) <i>Kelvin (K)</i>

##### 7. SPM 2007/2

Which of the following quantities is a vector quantity?

*Manakah antara kuantiti berikut ialah kuantiti vektor*

- |                           |                              |
|---------------------------|------------------------------|
| A Energy<br><i>Tenaga</i> | C Force<br><i>Daya</i>       |
| B Power<br><i>Kuasa</i>   | D Pressure<br><i>Tekanan</i> |

##### 8. SPM 2009/2

Which quantity is a vector quantity?

*Kuantiti manakah ialah kuantiti vector?*

- A Area / *Luas*
- B Length / *Panjang*
- C Distance / *Jarak*
- D Displacement / *Sesaran*

**1. SPM 2012/3**

Which of the following is a vector quantity?  
Antara berikut, yang manakah kuantiti vector?

- A Energy / Tenaga
- B Force / Daya
- C Mass / Jisim
- D Speed / Laju

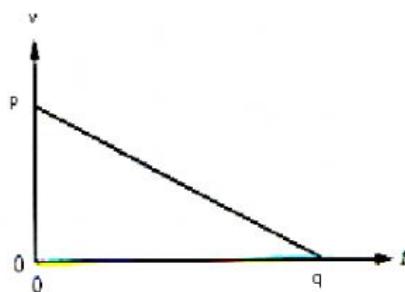
**10. SPM 2015/2**

Which quantity is a vector quantity?  
Kuantiti manakah adalah kuantiti vector?

- A Mass / Jisim
- B Energy / Tenaga
- C Pressure / Tekanan
- D Momentum / Momentum

**1.2 SCIENTIFIC INVESTIGATIONS****11. SPM 2003/2**

The graph shows the relationship between  $v$  and  $t$ .  
Graf manakah menunjukkan hubungan antara  $v$  dan  $t$ ?

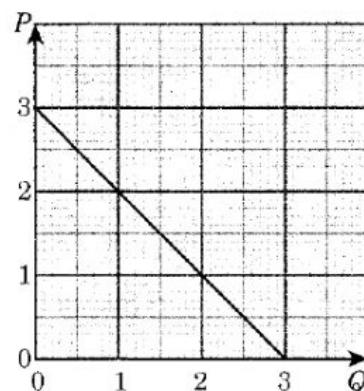


The relationship between  $v$  and  $t$  is represented by the equation  
Hubungan antara  $v$  dan  $t$  diwakili oleh persamaan

- A  $v = \frac{p}{q}t + p$
- B  $v = \frac{p}{q}t + q$
- C  $v = -\frac{p}{q}t + p$
- D  $v = -\frac{p}{q}t + q$

**12. SPM 2004/3**

The graph shows the relationship between physical quantities  $P$  and  $Q$ .  
Graf menunjukkan hubungkait antara kuantiti fizikal  $P$  dan  $Q$ .



Which statement about the graph correct?  
Penyataan manakah benar?

- A If  $Q=1$ , then  $P=2$   
Jika  $Q = 1$ , maka  $P = 2$
- B The gradient of the graph is 1  
Kecerunan graf ialah 1
- C  $P$  is directly proportional to  $Q$   
 $P$  berkadar terus dengan  $Q$
- D The equation of the graph is  $P=1+3Q$   
Persamaan graf ialah  $P=1+3Q$

**13. SPM 2006/2**

Which of the following graph obeys the equation  $F=kx$ , where  $k$  is constant.

Manakah antara graf berikut mematuhi persamaan  $F = kx$  dimana  $k$  ialah pemalar

