# SMART EXAM RESOURCES TOPIC : NUMBERS SUB-TOPIC:PERCENTAGE INCREASE SET-1-QP-MS 

In 1950, the population of Switzerland was 4714900.
In 2000, the population was 7087000.
(a) Work out the percentage increase in the population from 1950 to 2000.

Answer (a) \% [2]
(b) (i) Write the 1950 population correct to 3 significant figures.
Answer (b)(i) .......................................... [1]
(ii) Write the 2000 population in standard form.
Answer (b)(ii)

MARK SCHEME:

| 15 (a) | 50.3 | 2 | M1 for $\frac{(7087000-4714900)}{4714900}$ o.e. <br> must be recognisable complete <br> correct method |  |
| ---: | :--- | :---: | :--- | :---: |
| (b) (i) | 4710000 or $4.71 \times 10^{6}$ | 1 | 1 | accept $7.09 \times 10^{6}$, ignore <br> superfluous zeros |
| (ii) | $7.087 \times 10^{6}$ | 4 |  |  |

In 2004 Colin had a salary of $\$ 7200$.
(a) This was an increase of $20 \%$ on his salary in 2002.

Calculate his salary in 2002.

Answer (a)\$.
[2]
(b) In 2006 his salary increased to $\$ 8100$.

Calculate the percentage increase from 2004 to 2006.

## MARK SCHEME:

| (a) | 6000 | $\mathbf{2 *}^{*}$ | M1 $7200 \div 1.2$ oe |
| :--- | :--- | :--- | :--- |
| (b) | 12.5 | $\mathbf{2 *}^{*}$ | $\mathbf{M 1}(8100-7200) \div 7200$ oe |

3 A baby was born with a mass of 3.6 kg .
After three months this mass had increased to 6 kg .
Calculate the percentage increase in the mass of the baby.

## MARK SCHEME:

| 66.7 | 2 | M1 for $\frac{2.4}{3.6} \times 100$ o.e. |
| :--- | :---: | :--- |

4 In 1997 the population of China was $1.24 \times 10^{9}$. Calculate the percentage increase from 1997 to 2002.

## MARK SCHEME:

| 3.23 | $\mathbf{2}^{*}$ | M1 $\frac{\text { figs } 4}{\text { figs } 124}$ or $\frac{\text { figs } 128-\text { figs } 124}{\text { figs124 }}$ <br> Note 3.13 is M0 |
| :--- | :--- | :--- |

