## Percentages

## 1. Calculate the following: a) $12 \%$ of 67 b) $76 \%$ of 562 c) $32 \%$ of 458

2. What percentage of the group of a group obtain an 'A' grade if 14 out of a class containing 27 pupils get this grade?
3. What percentage of the group own a tablet if 26 out of 32 pupils are owners of one?
4. In a survey, $34 \%$ of Year 9 pupils said that strawberry is their favourites ice cream flavour how many pupils will this be if there are 192 pupils in Year 9?
5. Here is a table showing the membership of the Ace Sports Club

| ACE SPORTS CLUB MEMBERSHIP |  |  |  |
| :--- | :---: | :---: | :---: |
|  | Under 18 | Over 18 | Total |
| Men | 73 | 97 | 170 |
| Women | 84 | 93 | 177 |
| Total | 157 | 190 | 347 |

a. What percentage of the members are under 18 ?
b. What percentage of the women are over 18?
c. What percentage of the members are women under 18 ?
d. What percentage of the members are over 18 and men?
6. What is the new amount if 345 is increased by $12 \%$ ?
7. What amount remains if 518 is decreased by $35 \%$ ?
8. A boy puts $£ 25$ into a bank which agrees to pay $4 \%$ interest each year. If he does leaves it in the bank for 50 years. After this time, what will the amount of money in the bank?
9. Over a 15 year period, there is a $2 \%$ increase each year in violent crime for ten years then for the next 5 years there is a reduction of $4 \%$ each year. If there were 250 violent crimes in Nottingham at the start of this period, how many were there at the end of the 15 years?
10. If 256 is increased to 289 , what will this be as a percentage increase?
11. If 345 is increased to 312 , what will this be as a percentage decrease?
12. If the students doing a part-time job increases from 12 to 20 , what will this be as a percentage increase?

