## More Percentage Questions

1. Tanya says "an increase from 40 to 80 is a 100% increase". Scott says "so a decrease from 80 to 40 is a 100% decrease".

Who is correct, if anyone, and why? Who is wrong, if anyone, and why?

- 2. Ned weeds 20% of his garden every day for a week. He thinks he will have weeded 140% of his garden by the end of the week. Comment on this.
- 3. Nellie plans to weed 20% of the remaining unweeded portion of her garden every day. How long will it take her to weed her garden?
- 4. The headmaster boasts at Speech Day that 55% of his fifth year gained a certificate in English and 45% gained certificate in mathematics, so 100% of the fifth gained at least one of these two subject certificates. Is he correct? Could he possibly be correct?
- 5. A newspaper reports that a country has the worst unemployment problem in the world as last year the number of unemployed people rose by 100%. Is the newspaper correct to make this deduction? Give reasons for your argument.
- 6. If a quantity is increased by 200% how many times bigger is it?

If it is increased by 100% how many times bigger is it?

7. In 2000 a club had 600 members. In 2001 its membership dropped by 10%. The club membership secretary told the committee that the club must increase its membership by 10% to get it back to 600 members as in 2000. The club treasurer replied that in fact the membership must increase by just over 11% for it to get back to 600.

Who is correct, and why? Should the club secretary and the club treasurer swap positions, and why?