

- 8) Use each of the digits 1, 2, 3, 4, 5, 6, 7 and 8 at most once each in the boxes below

Increase/Decrease by %

Try and get as close as possible to the numbers below with your final answer

- a) 400 b) 650 c) 100 d) 1000
- 9) My height increases by 20%. What fraction of my new height is my old height.
- 10) My mass decreases by 75%. What percentage increase in mass would I now need to return to my original mass?

Challenge

- 1) The Grand Old Duke of York had 10,000 men. He lost 10% of them on the way to the top of the hill and then he lost 15% of the rest as he marched them back down the hill. What percentage of the 10,000 men were there still when they reached the bottom of the hill?
- 2) What is the difference between 40% of 50% of 60 and 50% of 60% of 70?
- 3) Inspector Remorse had a difficult year in 2004. A crime wave in Camford meant that he had 20% more cases to solve than in 2003, but his success rate dropped. In 2003, he solved 80% of his cases, but in 2004 he solved only 60% of them. What was the percentage change in the number of cases he solved in 2004 compared with 2003?

Answers 1) £60 b) 45m c) 138cm d) 0.65 litres e) £18.90 f) 3.7kg

2) Jumper £32 Skirt £14.40 Hat £7.20 Scarf £10 3) to be discussed

4) Wooties 800g Shriddies 600g Riz Pops 960g Brain Flakes 1.6kg

5) Fountains 125 Stray 275 Knaresborough 45 6) 135% 7) 90% 9) $\frac{5}{6}$ 10) 300%

C1) 76.5% C2) 9 C3) Down by 10%