

KS3 – Percentages

Section A – Percentages of Amounts

Q1 (4 marks)

Work out.

a) 10% of 70

b) 50% of 84

c) 25% of 60

d) 5% of 240

Q2 (3 marks)

Work out.

a) 20% of 45

b) 30% of 120

c) 15% of 80

Q3 (3 marks)

Work out.

a) 35% of 60

b) 45% of 160

c) 65% of 240

Q4 (3 marks)

Work out.

a) 12% of 250

b) 18% of 350

c) 32% of 425

Q5 (2 marks)

A school has 320 students in Key Stage 3.

40% of the students are in Year 8. How many Year 8 students are there?

Q6 (2 marks)

A jacket costs £75.

The shop offers a discount of 20% of the original price. Work out the value of the discount.

Challenge

Q7 (2 marks)

A theatre has 450 seats. 72% of the seats are occupied.

How many seats are occupied?

Section B – Percentage Increase & Decrease

Q8 (2 marks)

Increase each amount by the percentage shown.

a) £60 by 10%

b) £80 by 25%

Q9 (2 marks)

Decrease each amount by the percentage shown.

a) £90 by 20%

b) £240 by 15%

Q10 (3 marks)

Increase each amount by the percentage shown.

a) 150 by 12%

b) £320 by 7.5%

c) 480 by 35%

Q11 (3 marks)

Decrease each amount by the percentage shown.

a) 250 by 18%

b) £560 by 12.5%

c) 720 by 35%

Q12 (2 marks)

A bicycle costs £480. Its price increases by 15%.

Work out the new price.

Q13 (2 marks)

A television costs £650. It is reduced by 22% in a sale.

Work out the sale price.

Challenge

Q14 (3 marks)

A town has a population of 24,000. The population increases by 8% in one year. The following year, the new population decreases by 5%.

Work out the population after the two changes.

Q15 (2 marks)

A phone originally costs £800. Its price is reduced by 30% and then reduced by a further 10% of the new price.

Work out the final price.

Section C – Percentage Change

Q16 (2 marks)

Find the percentage increase from 40 to 50.

Q17 (2 marks)

Find the percentage decrease from 80 to 60.

Q18 (3 marks)

Find the percentage change. State whether it is an increase or a decrease.

a) 50 to 65

b) 120 to 90

c) 200 to 270

Q19 (3 marks)

Find the percentage change. State whether it is an increase or a decrease.

a) £160 to £184

b) 350 kg to 294 kg

c) 48 cm to 60 cm

Q20 (2 marks)

A football club had 500 members last year and 575 members this year.
Work out the percentage increase in membership.

Q21 (2 marks)

The price of a laptop falls from £900 to £765.
Work out the percentage decrease in price.

Challenge

Q22 (3 marks)

A house was bought for £240,000 and later sold for £276,000.
Work out the percentage increase in its value.

Q23 (3 marks)

A company's monthly electricity use falls from 1,250 kWh to 1,075 kWh.
Work out the percentage decrease in electricity use.

Total: ____ / 58

Percentage: ____%