

PERCENTAGE INCREASE & DECREASE

Task 1

- 1) Increase £50 by 10%
 $10\% \text{ of } £50 = £5$
 $£50 + £5 = \text{£}55$
- 2) Increase £120 by 25%
 $25\% \text{ of } £120 = £30$
 $£120 + £30 = \text{£}150$
- 3) Increase 80 by 5%
 $5\% \text{ of } 80 = 4$
 $80 + 4 = 84$
- 4) Increase 200 by 30%
 $30\% \text{ of } 200 = 60$
 $200 + 60 = 260$
- 5) Increase £75 by 20%
 $20\% \text{ of } £75 = £15$
 $£75 + £15 = \text{£}90$
- 6) Increase 60 by 45%
 $45\% \text{ of } 60 = 27$
 $60 + 27 = 87$
- 7) Increase £40 by 12.5%
 $12.5\% \text{ of } £40 = £5$
 $£40 + £5 = \text{£}45$
- 8) Increase £160 by 50%
 $50\% \text{ of } £160 = £80$
 $£160 + £80 = \text{£}240$
- 9) Increase 36 by 30%
 $30\% \text{ of } 36 = 10.8$
 $36 + 10.8 = 46.8$
- 10) Increase £24 by 8%
 $8\% \text{ of } £24 = £1.92$
 $£24 + £1.92 = \text{£}25.92$

Task 2

- 11) Decrease £90 by 10%
 $10\% \text{ of } £90 = £9$
 $£90 - £9 = \text{£}81$
- 12) Decrease £240 by 50%
 $50\% \text{ of } £240 = £120$
 $£240 - £120 = \text{£}120$
- 13) Decrease 160 by 15%
 $15\% \text{ of } 160 = 24$
 $160 - 24 = 136$
- 14) Decrease £300 by 40%
 $40\% \text{ of } £300 = £120$
 $£300 - £120 = \text{£}180$
- 15) Decrease £120 by 3%
 $3\% \text{ of } £120 = £3.60$
 $£120 - £3.60 = \text{£}116.40$
- 16) Decrease £80 by 15%
 $15\% \text{ of } £80 = £12$
 $£80 - £12 = \text{£}68$
- 17) Decrease £64 by 12.5%
 $12.5\% \text{ of } £64 = £8$
 $£64 - £8 = \text{£}56$
- 18) Decrease £100 by 50%
 $50\% \text{ of } £100 = £50$
 $£100 - £50 = \text{£}50$
- 19) Decrease £54 by 80%
 $80\% \text{ of } £54 = £43.20$
 $£54 - £43.20 = \text{£}10.80$
- 20) Decrease £48 by 5%
 $5\% \text{ of } £48 = £2.40$
 $£48 - £2.40 = \text{£}45.60$

Task 3

- 21) A jacket costs £80. It increases in price by 15%. What is the new price of the jacket?

$$15\% \text{ of } £80 = £12$$

$$£80 + £12 = £92$$

- 22) A phone was priced at £400 but is now 25% cheaper in a sale. What is the sale price?

$$25\% \text{ of } £400 = £100$$

$$£400 - £100 = £300$$

- 23) Sarah earns £200 a week. Her wage increases by 10%. What is the difference between her new wage and old wage?

$$10\% \text{ of } £200 = £20$$

$$£200 + £20 = £220$$

$$£220 - £200 = £20$$

- 24) A bicycle worth £150 loses 20% of its value after a year. What is the bicycle worth now?

$$20\% \text{ of } £150 = £30$$

$$£150 - £30 = £120$$

- 25) A school in London has 500 students. This number increases by 5%. A school in Surrey has 570 students. This number decreases by 10%. Which school has more students?

$$5\% \text{ of } 500 = 25$$

$$500 + 25 = 525$$

$$10\% \text{ of } 570 = 57$$

$$570 - 57 = 513$$

The school in London has more students.

- 26) A £90 pair of shoes is reduced by 30% in a sale. 20% VAT is then added to the discounted price. What is the final price of the shoes?

$$30\% \text{ of } £90 = £27$$

$$£90 - £27 = £63$$

$$20\% \text{ of } £63 = £12.60$$

$$£63 - £12.60 = £50.40$$

- 27) A shop increases the price of a chocolate bar by 12.5%. The original price was £1.60.

What is the new price?

$$12.5\% \text{ of } £1.60 = £0.20$$

$$£1.60 + £0.20 = £1.80$$

- 28) A laptop has a price of £400. The price first increases by 10%, then decreases by 15%. What is the final price of the laptop?

$$10\% \text{ of } £400 = £40$$

$$£400 + £40 = £440$$

$$15\% \text{ of } £440 = £66$$

$$£440 - £66 = £374$$

- 29) A phone originally cost £240. The cost decreased by 20%, then increased by 25%. What was the final price?

$$20\% \text{ of } £240 = £48$$

$$£240 - £48 = £192$$

$$25\% \text{ of } £192 = £48$$

$$£192 + £48 = £240$$

- 30) An item is reduced by 10% in January, then reduced by a further 20% in February. The final price was £72. What was the original price?

February reduction: £72 is 80%

$$10\% = £9$$

$$100\% = £90$$

January reduction: £90 is 90%

$$10\% = £10$$

$$100\% = £100$$

The original price was £100.