**Task 1**

1) A number increases from 40 to 52. What is the percentage increase?

2) A number decreases from 90 to 72. What is the percentage decrease?

3) A number increases from 25 to 45. Work out the percentage increase.

4) A number decreases from 120 to 84. Work out the percentage decrease.

5) Work out the percentage change of a number that increased from 16 to 20.

6) Work out the percentage change of a number that decreased from 74 to 60. Give your answer to 2 decimal places.

7) A number decreases from 180 to 140. Express the percentage decrease to 3 significant figures.

8) Work out the percentage decrease from £42.50 to £37. Give your answer to 2 decimal places.

13) The price of a cinema ticket decreased from £12 to £10.20. Work out the percentage change in the cost of the ticket.

14) A laptop's value decreased from £1,200 to £936. Calculate the percentage decrease in the value of the laptop.

15) A train fare increased from £18.60 to £23.25 Work out the percentage increase of the train fare.

16) A mobile phone value depreciates from £800 to £639.20. What is the percentage decrease in the value of the phone?

17) The price of a jumper increased from £27 to £35.84. Calculate the percentage increase. Give your answer to 2 decimal places.

18) A cyclist's top speed went from 23 km/h to 27.5 km/h after training. What is the percentage increase in their speed? Give your answer to 1 decimal place.

**Task 2**

9) The price of a Nintendo console increased from £250 to £300. Work out the percentage increase in the price of the console.

10) A tablet was on sale for £270, down from £300. What percentage discount was applied to the tablet?

11) The price of a football match ticket dropped from £50 to £48. What is the percentage decrease in the price of the ticket?

12) A treadmill that cost £1,500 went on sale for £960. What is the percentage decrease in the price of the treadmill?

**Task 3**

19) Sue bought a dress for £80 and re-sold it for £65. What is Sue's percentage loss on the sale of the dress?

20) A company buys software for £8,000 and later sells the license for £6,000. What is the percentage loss on the sale of the software?

21) A trader buys a painting for £120,000 and resells it for £180,000. What is their percentage profit?

22) Ariella purchased a home for £240,000. Five years later, she sells the home for £315,000. Calculate Ariella's percentage profit on the sale of the home.

23) A baker spends £18 to make 25 cupcakes and sells them for £1 each. Calculate the baker's percentage profit to the nearest percentage.

24) A store buys 12 mugs for £36 and sells them for £4 each. Calculate the store's percentage profit. Give your answer to 1 decimal place.

25) An artist spends £120 on materials and £80 on framing. She sells the artwork for £275. Calculate the artist's percentage profit.

26) A small café buys 100 bagels for £45. The bagels are resold in packs of 5 for £3.50 each. Calculate the percentage profit on the sale of the bagels. Give your answer to 3 significant figures.

Challenge

27) A developer buys land for £150,000 and spends £210,000 building a house. They sell the house for £450,000 but pay 8% of the sale price in fees. What is the percentage profit overall?

28) Emma buys a batch of 200 notebooks for £320. She bundles them into packs of 10 and sells each pack for £20. After sales tax of 10% on total revenue, what is her percentage profit?

29) A retailer buys 150 pairs of shoes at £18 per pair. 20 pairs are damaged and cannot be sold. The remaining shoes are sold at £30 per pair. Calculate the overall percentage profit. Give your answer to 1 decimal place.

30) A restaurant buys 120 kg of flour at £0.80/kg. 15% of the flour is spoiled. The rest of the flour is used to bake and sell bread loaves at £2.50 each using 0.6 kg per loaf. Calculate the percentage profit on the bread loaves. Give your answer to 1 decimal place.