

## Topic 11 – Percentages

1. Harry left his £25 000 Premium Bond winnings in a special savings account for 3 years.

The annual rate of interest was 4.5%.

How much were his savings then worth ?

2. Joan was told that if she left her savings of £2400 in the Scotia Bank for 5 years they would give her a special annual rate of 5.4%.

How much would her £2400 be worth at the end of the 5 year period ?

3. Calculate the total compound interest due when the following investments are made :-

(a) Colin deposited £360 in the bank for 3 years with an annual interest rate of 2.5%.

(b) Alex put by £5000 in the bank for 2 years with an annual interest rate of 3.2%.

(c) Tim paid in £600 to his bank and left it for 2 years. The annual interest rate was  $3\frac{1}{2}\%$ .


4. The painting I bought last year rose by 40% in value this year. It is **now** worth £560.

How much must I have paid for the painting ?

- 5.

Because of a fault in a thermostat, the temperature in an oven rises by 35% to 324°C.

What was the temperature before the fault ?

6.  On his 14th birthday, Otis found he was 12% **taller** than he was on his previous birthday.

He was 1.68 m tall on his 14th birthday.

How tall was Otis on his 13th ?

7. When a speeding motorist overtook a police car, the police increased their speed by 60% to catch him.



If the police car was then doing 80 mph, what was its speed before it accelerated ?