WJEC Past Paper Questions

Tier: Intermediate

Topic: Compound interest AER APR

Intermediate Numeracy Summer 2017 P1 Q5b

(b) The talent contest is held once a year.

Every year, the cost of putting on the talent contest increases by 10% of the previous year's cost.

In summer 2014 the cost was £6600.

Calculate the cost of putting on the summer 2017 talent contest. You must show all your working.

[3]

Intermediate Numeracy Nov 2016 P2 Q6



(a) The total area of all the woodlands in Wales is 303 000 hectares.

Individual woodlands that have an area of 2000 hectares or more make up 76% of the total area of all the woodlands in Wales.

Complete the following statement.

'Woodlands with areas of less than 2000 hectares in Wales cover a total area of

......hectares.' [3]

(b) The price of softwood changes each year.

The price has increased by 6% per annum for each of the last **5 years**. Before this, the price had decreased by 2% per annum.

Seven years ago the price of softwood was £34 per m³.

Calculate the current price of softwood.

[3]

Intermediate Numeracy Sam 1 P2 Q9

Carys decides to invest £380 in a savings account for 6 years. The account pays a rate of 2-54% AER.

Will Carys have sufficient money in her savings account to be able to buy a motor scooter costing £460 in 6 years' time? You must show all your working and give a reason for your answer.



[4]

Tier: Intermediate

Topic: Compound interest AER APR

Intermediate Numeracy Sample 2 P2 Q10

Sabrina sees the following advertisement.

Money Today

Borrow today - why wait until payday?

Costs 1% per day compound interest

Sabrina knows that she will be paid in 2 weeks' time. She decides to borrow £400 for a period of 2 weeks.

How much will Sabrina have to pay back after 2 weeks? Show all your working.

[3]

Intermediate Numeracy Summer 2017 P2 Q10

Mali's scooter depreciated (decreased) in value by 24% in the **first** year. In all further years, her scooter depreciated by 13% of its previous year's value. She originally paid £850 for her scooter. Calculate the value of Mali's scooter after 7 years.

[3]

Intermediate Maths Nov 2018 P2 Q10a

A number is decreased by 12% of its value.

This is done 3 times, each time decreasing the previous value by 12%. Circle the multiplier that you would use to find the value after the 3 decreases.

[1]

× 0.36

 $\times 0.88^{3}$

 $\times 0.12^{3}$

 $\times 0.3^{12}$

 $\times 0.388$

Intermediate Maths Summer 2018 P1 Q10b

(b) A number is increased by 4% of its value.

This is done 7 times, each time increasing the previous value by 4%. Circle the multiplier that you would use to find the value after the 7 increases.

[1]

 $\times 1.04^{7}$

 $\times 1.4^{7}$

 $\times 0.04^{7}$

 $\times 1.04^{6}$

× 1.28

Intermediate Numeracy Summer 2018 P1 Q11a

(a) Kingsley invests £3000 in an account that pays 2% compound interest per annum. He does not make any further payments into his account. He does not withdraw any money from his account.

How much will Kingsley have in his account after two years?

[3]