A picture containing drawing

Description automatically generatedSimple vs. Compound Interest

1. Robert has £4000 to invest in a savings account for 3 years.

He finds information about two savings accounts.

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| **Best Bank**  Simple interest  1.4% each year |  | **Star Savings**  Compound interest  1.5% each year |

Robert wants to have as much money as possible in his savings account at the end of the 3 years.

Which of these two savings accounts should he choose?

2. Here are the interest rates for two bank accounts.

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| **Central Savings**  Compound interest  2.5% each year |  | **West Coast Bank**  Simple interest  2.7% each year |

Betty puts £6400 in each account.

Calculate the difference in value between the two accounts after 8 years.

Give your answer correct to the nearest penny.

3. Shabir wants to invest £500 in a savings account for 6 years.

He researches interest rates for three different savings accounts.

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| **A**  Compound interest  1.9% each year |  | **B**  Simple interest  2.1% each year |  | **C**  £60 bonus pay-out after 6 years |

Which savings account should he choose to invest his money in?

4. Adam invests £260 in Eastern Star Bank.

Mikaela invests £250 in Circle Building society.

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| **Eastern Star Bank**  Compound interest  1.6% each year |  | **Circle Building Society**  Simple interest  2.4% each year |

After how many years will Mikaela’s investment be worth more than Adam’s?

**Extension**: Will Mikaela’s investment always be worth more after this?

Hint: could you use graphing software to make this easier?