

GCSE Exam Questions

Simple Interest | Number



GCSE Exam Questions: Simple Interest

1)	(a) Isla would like to save £2,500. She has two account options:	
	Account A: 0.5% simple interest every 2 months	
	Account B: 5% simple interest per year.	
	Which account will give her the best return on her savings?	
	Give a reason for your answer.	
		(2)
		(2)
	(b) Using your answer to part (a), how much money would Isla have	
	in the account after 5 years with no withdrawals?	
		(2) (4 marks)



GCSE Exam Questions: Simple Interest

2)	(a)	The value of shares in a stock market reduces by 9.5% every 30 seconds, simple interest. Initially the shares are worth £400. Calculate the value of the shares after 1 minute.		
		(3)		
2)	(b)	Calculate the time needed to increase the value back to £400 with a simple interest rate of 3% every minute.		
		(3) (6 marks)		
3)		Tom invests £3,000 in a savings account which has a simple interest rate of 2.5% per year.		
		Jane invests £5,000 in a different savings account which has a simple interest rate of 1.2% per year.		
		Find the difference in their investments after 5 years.		
		(5 marks)		



GCSE Exam Questions: Simple Interest

4)	(a)	Find the simple interest rate which increases an investment of			
		£4,000 to £4,576 over a period of 9 years.			



- **(b)** An investment is worth £8,000 after 15 years in a simple interest savings account.
 - If the interest rate was 4%, find the value of the initial investment.

(3) (6 marks)



GCSE Exam Questions: Simple Interest Answers

	Question	Answer	Marks
1) (a)	Isla would like to save £2,500. She has two account options:	$0.5 \times 6 = 3\%$ per year	(1)
	Account A: 0.5% simple interest every 2 months Account B: 5% simple interest per year.	Account B	(1)
	Which account will give her the best return on her savings?		
	Give a reason for your answer.		
1) (b)	Using your answer to part (a), how much money would Isla have in the account after 5 years with no withdrawals?	$2500 \times (0.05 \times 5)$ or 2500×0.25	(1)
		= £3,125	(1)
2) (a)	The value of shares in a stock market reduces by 9.5% every 30 seconds, simple interest. Initially the shares are worth £400. Calculate the value of the shares after 1 minute.	19% reduction	(1)
		40×0.81	(1)
		= £324	(1)
2) (b)	Calculate the time needed to increase the value back to £400 with a simple interest rate of 3% every minute.	£76 required	(1)
		$75 \div (324 \times 0.03)$	(1)
		7.82 minutes	(1)
3)	Tom invests £3,000 in a savings account which has a simple interest rate of 2.5% per year.	$3,000 \times (1 + 0.025 \times 5)$	(1)
		=£3,375	(1)
	Jane invests £5,000 in a different savings account which has a simple interest rate of 1.2% per year.	$5,000 \times (1 + 0.012 \times 5)$	(1)
		= £5,300	(1)
	Find the difference in their investments after 5 years.	Difference = £1,925	(1)
4) (a)	Find the simple interest rate which increases an investment of £4,000 to £4,576 over a period of 9 years.	576 ÷ 9 = 64	(1)
		$\frac{64}{4000} \times 100$	(1)
		= 1.6%	(1)
4) (b)	An investment is worth £8,000 after 15 years in a simple interest savings account. If the interest rate was 4%, find the value of the initial investment.	$0.04 \times 15 = 0.6$	(1)
		8,000 ÷ 1.6	(1)
		= £5,000	(1)

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