




# Countdown to your final Maths exam ...

## Part 2 (2019)

	Marks	Actual	  
Q1. Convert a decimal to a percentage	1		
Q2. Convert a fraction to a percentage	1		
Q3. Find a price after discount (Clip 10)	3		
Q4. Solve simple interest money problem (Clip 11)	3		
Q5. Calculate percentage of an amount (Clip 10)	2		
Q6. Calculate the interest of an investment (Clip 11)	3		
Q7. Calculate with simple interest (Clip 11)	3		
Q8. Express quantities as fractions and percentages	3		
Q9. Read a table and solve a money problem (Clip 10)	5		
Q10. Solve fractions/percentages problem	4		
Q11. Solve compound interest problem (Clip 11)	4		
Q12. Solve percentage money problem (Clip 10)	3		
Q13. Read a table and solve a money problem (Clip 10)	6		
Q14. Understand depreciation (Clip 12)	3		
Q15. Reverse percentages (Clip 13)	2		

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- Q1. Write 0.8 as a percentage. (1)
- Q2. Write  $\frac{3}{5}$  as a percentage. (1)
- Q3. A television has a normal price of £675  
In a sale the price is reduced by 32%.  
Work out the price of the television in the sale. (1)
- Q4. Joe invests £300 at a simple interest rate of 4.5% per year.  
At the end of each year Joe gives the interest to a charity.  
Work out the least number of years it will take for the total amount given to the charity to be greater than £50 (3)
- Q5. There are 210 counters in a bag. 30% of these counters are red.  
Work out the number of red counters in the bag. (3)
- Q6. Fiona invests £2500 for 2 years at  $3\frac{1}{2}$  % per annum compound interest.  
Work out the value of her investment at the end of 2 years. (2)
- Q7. Alison invests £400 for 5 years in a savings account.  
The account pays simple interest at a rate of 3.5% per year.  
Work out the total amount of interest Alison gets. (3)
- Q8. There are 200 students in Year 11. 75 of the students are girls.  
(a) Write down the fraction of the students that are girls. (1)

There is a total of 1350 students in the school. One day, 81 of the 1350 students are absent.

(b) Work out the percentage of the students who are absent.

(2)

Q9. The Jenkins family are going to go to New York. They will go with Highway Airlines or Jetstream Airlines. The tables show how much it costs for each adult and each child to go with these airlines.

Highway Airlines		
Date	Adult	Child
4-10 July	£475	£280
11-17 July	£488	£282
18-24 July	£516	£304
25-31 July	£506	£297
1-7 August	£462	£251
8-14 August	£430	£238
15-21 August	£421	£235
22-28 August	£399	£221

Jetstream		
Date	Adult	Child
4-10 July	£483	£286
11-17 July	£493	£296
18-24 July	£526	£315
25-31 July	£519	£303
1-7 August	£485	£218
8-14 August	£429	£245
15-21 August	£409	£232
22-28 August	£401	£222

Highway Airlines give a discount of 5% of the total cost for booking online.

Jetstream give a discount of £25 per person for booking online.

The Jenkins family are going to New York on 3 August. They will buy 2 adult tickets and 1 child ticket. They will book online.

The Jenkins family want to pay the lower total cost. Which airline should they choose?

(5)

Q10. Al, Bob and Chris did a Maths test. The total for the test was 40 marks.

Al got 16 out of 40

Bob got 35% of the 40 marks.

Chris got  $\frac{3}{8}$  of the 40 marks.

Who got the highest mark? You must show all your working.

(4)

Q11. Anna has £40 000 to invest. She is going to invest in a scheme from either the building society or the bank.

	Scheme
Building Society	3% per annum compound interest
Bank	Invest £40,000 in a bond that pays £2550 interest at the end of two years.

Anna wants to invest in the scheme that gives the most interest. Which scheme should Anya invest in?

(4)

Q12. Kelly invested £2000 for two years.

By the end of the first year, the value of the investment was 15% more than its value at the beginning of the year.

By the end of the second year, the value of the investment was 10% more than its value at the end of the first year.

Work out the value of the investment at the end of the second year.

(3)

Q13. Mr and Mrs Jenkins are planning a holiday to Italy. They will go on holiday with their 11-year-old daughter. The table below shows some information about the prices of flights.

Flight to Italy		Flight back from Italy	
Date	Price per adult (£)	Date	Price per adult (£)
28th October	282	4th November	305
29th October	283	5th November	303
30th October	282	6th November	285
31st October	272	7th November	283
Child fares			
0 to 2 years old		No charge	
Over 2 to 12 years old		75% of the adult fare	

Mr and Mrs Jenkins and their daughter want to fly to Italy on 29th October. They want to fly back from Italy on 6th November.

They have £1600 to spend on flights. Do they have enough money for the flights?

You must show all your working.

(6)

Q14. The value of a motor bike depreciates by 20% each year.

Mike says: "After two years, the value of the motor bike will have reduced by 40%".

He is wrong. Explain why.

(3)

Q15. In a sale, normal prices are reduced by 20%. The normal price of a coat is reduced by £15

Work out the normal price of the coat.

(2)