




Countdown to your final Maths exam ...

Crossover ... Part 3 (2020)

	Marks	Actual	  
Q1. Powers / Estimation (Clip 70)	3		
Q2. Estimation (Clip 70)	3		
Q3. Fractions (Clip 14/15) & Estimation (Clip 70)	5		
Q4. Percentages (Clip 10)	3		
Q5. Percentages (Clip 10)	2		
Q6. Percentages (Clip 10)	2		
Q7. Estimation (Clip 70)	3		
Q8. Percentages (Clip 10)	3		
Q9. Fractions to percentages	1		
Q10. Ratio to percentages	2		
Q11. Estimation (Clip 70)	3		
Q12. Percentages (Clip 10)	3		
Q13. Percentages (Clip 10)	5		
Q14. Percentages (Clip 10)	5		
Q15. Percentages (Clip 10)	3		

46

NON-CALCULATOR UNLESS SPECIFIED



Questions

Q1.(a) Write down the square of 8

(1)

(b) Write down the value of 10^3

(1)

(c) Estimate the value of $\sqrt{20}$

(1)

Q2. A ticket for a seat at a school play costs £2.95

There are 21 rows of seats. There are 39 seats in each row.

The school will sell all the tickets.

Work out an estimate for the total money the school will get.

(3)

Q3. (a) Work out $1\frac{3}{4} + 3\frac{1}{2}$

(1)

(b) Work out $\frac{3}{7} \times £28$

(2)

(c) Estimate the value of 19.89×201.71

(2)

Q4.A set of tyres normally costs £500

In a sale there is a 30% discount.

Work out the sale price of the set of tyres.

(3)

Q5. Lydia is buying a ring. The ring costs £60

She pays a deposit of 40%.

Work out how much she pays as the deposit.

(2)

Q6. There are 892 litres of oil in Mr Aston's oil tank.

He uses 18.7 litres of oil each day.

Estimate the number of days it will take him to use all the oil in the tank.

(2)

Q7. Work out an estimate for $\frac{31 \times 9.87}{0.509}$

(3)

Q8. A ticket to a theme park costs £35 plus 20% VAT.
Work out the total cost of the ticket.

(3)

Q9. Write $\frac{4}{5}$ as a percentage.

(1)

Q10. There are only red buttons, yellow buttons and orange buttons in a jar.
The number of red buttons, the number of yellow buttons and the number of orange buttons are in the ratio 7 : 4 : 9
Work out what percentage of the buttons in the jar are orange.

(2)

Q11. Ami and Josh use a calculator to work out $\frac{595}{4.08^2 + 5.3}$
Ami's answer is 27.1115
Josh's answer is 271.115
One of these answers is correct.
Use approximations to find out which answer is correct.

(3)

Q12. In a sale normal prices are reduced by 20%.
A washing machine has a sale price of £464
By how much money is the normal price of the washing machine reduced?



(3)

Q13. Bhavin buys a car in a sale. Before the sale, the cost of the car was £6720
In the sale, the cost of every car is reduced by 20%.
Bhavin pays a deposit of £1500
He will pay the rest of the cost in 24 equal monthly payments.
Work out the amount of each monthly payment. You must show all your working.



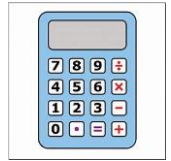
(5)

- Q14.** Petra booked a family holiday.
The total cost of the holiday was £3500 **plus** VAT at 20%.
Petra paid £900 of the total cost when she booked the holiday.
She paid the rest of the total cost in 6 equal monthly payments.
Work out the amount of each monthly payment.



(5)

- Q15.** Emily buys a pack of 12 bottles of water.
The pack costs £5.64
Emily sells all 12 bottles for 50p each.
Work out Emily's percentage profit.
Give your answer correct to 1 decimal place.



(3)