




# COUNTDOWN TO YOUR FINAL MATHS EXAM ...

## PART 3 (2018)



	Marks	Actual	  
Q1. Percentages to fractions	1		
Q2. Percentage of an amount (Clip 10)	4		
Q3. Fractions/Decimals/Percentages	2		
Q4. Percentages & Ratio (Clip 10 & Clips 16/17)	4		
Q5. Fractions (Clips 14/15)	4		
Q6. Percentage of an amount (Clip 10)	2		
Q7. Timetables	5		
Q8. Percentage /Fraction of an amount (Clip 10)	4		
Q9. Percentage of an amount (Clip 10)	3		
Q10. Percentage of an amount (Clip 10)	3		
Q11. Percentage of an amount (Clip 10)/ Reading tables	5		
Q12. Reverse Percentages (Clip 13)	2		
Q13. Fractions (Clips 14/15)	2		
Q14. Fraction to decimal conversion	1		
Q15. Fractions / Decimals	3		

**45**

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## Questions

**Q1.** Write 27% as a fraction.

(1)

**Q2.** 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)

**Q3.** Write these numbers in order of size. Start with the smallest number.

35%       $\frac{3}{10}$       0.32       $\frac{2}{5}$       0.25

(2)

**Q4.** There are 165 counters in a bag.

Each counter is either black or white.

There are twice as many black counters as white counters in the bag.

Martine takes 40% of the black counters from the bag.

Work out the ratio of the number of black counters to the number of white counters now in the bag.  
Give your ratio in its simplest form.

(4)

**Q5.** (a) Work out  $\frac{2}{7} + \frac{1}{5}$

(2)

(b) Work out  $1\frac{2}{3} \div \frac{3}{4}$

(2)

**Q6.** 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)**

**Q7.** Emma lives in Manchester. She is planning to travel from Manchester to Blackpool.

The timetable shows information about the times of the trains Emma can catch from Manchester.

Manchester to Blackpool			
Manchester	08 00	09 15	10 30
Bolton	08 20	09 30	10 57
Preston	08 45	09 55	11 25
Blackpool	09 30	10 40	11 52

Emma is going to meet her friend in Blackpool at 11 am.

(a) What is the time of the latest train she can catch?

**(1)**

(b) Work out the least time one of these trains takes from Manchester to Blackpool.

..... minutes **(3)**

Emma and her friend spend  $\frac{3}{4}$  hour having lunch.

(c) Write  $\frac{3}{4}$  hour in minutes.

..... minutes **(1)**

**Q8.** Two shops, Mega Bathrooms and Bathroom Mart, each have a sale.

Sally wants to buy some bathroom units. The units have a normal price of £1500

Sally wants to buy the units as cheaply as possible.

Which shop should she buy the units from? You must show all your working.

<p><b>Mega Bathrooms</b></p> <p>Sale</p> <p>60% off normal price then 15% off</p>
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<p><b>Bathroom Mart</b></p> <p>Sale</p> <p><math>\frac{2}{3}</math> off normal price</p>
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**(4)**

**Q9.** The normal price of a watch is £80 in two shops, Tymes and Sekonds.

Both shops have a sale.

In Tymes the normal price of the watch is reduced by £18

In Sekonds the normal price of the watch is reduced by 20%

Which shop is selling the watch for the cheaper price in the sale?

You must show your working.

**(3)**

**Q10.** Kevin wants to get the ferry to Ireland.

A ferry crossing costs

£125 on Saturdays

£109 on Mondays

Kevin has a voucher for 15% off the cost of a ferry crossing on Mondays.

Kevin can go on Saturday without using the voucher or on Monday using the voucher.

What is the difference in the cost of the ferry crossing if Kevin goes on Monday rather than on Saturday?

**(3)**

**Q11.** Debra and Mark are planning to go on a cruise. They can travel with one of two companies, Caribbean Calypso or Royal European.

The table shows the cost per person to travel with each company.

		Type of cabin			
		Inside	Outside	Balcony	Suite
Cost per person	Caribbean Calypso	£1136	£1319	£1529	£2329
	Royal European	£1043	£1263	£1484	£2147

Caribbean Calypso has a discount of 10% if you book online.

Royal European has a discount of 5% if you book online.

Debra and Mark are going to book a suite for their cruise.

They are going to book online.

Debra and Mark want to pay the lowest possible cost.

Which company should they choose?

You must show all your working.

**(5)**

**Q12.** 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)**

**Q13.** Work out  $\frac{1}{3} + \frac{5}{9}$

**(2)**

**Q14.** Write  $\frac{7}{16}$  as a decimal.

**(1)**

**Q15.** (a) Write  $\frac{1}{2}$  as a decimal.

**(1)**

(b) Write 0.75 as a fraction.

**(1)**

(c) Write 19 out of 30 as a fraction.

**(1)**