	Reverse Percentages	
1	This year Beth paid £145.60 for her annual travel insurance. This is an increase of 12% on her last year's payment. How much did Beth pay last year?	3
2	An industrial machine has depreciated by 5% since it was bought last year. The current value of the machine is £16720. What was the value of the machine when it was new?	3
3	Jamie paid £306 for a laptop in a sale. The sale discount was 15%. Calculate the original price of the laptop.	3
4	552 000 tickets were sold for a sporting event. 8% of the available tickets were left unsold. Calculate the total number of tickets available for this event.	3
5	Finlay had his car repaired. He did not pay on time and was charged an extra 3.5% for making a late payment. The total he paid was £465.75. Calculate how much he would have paid if he had settled his bill on time.	3
	15 marks	

	Reverse Percentages – Answers		
1	Mark 1 know that the current payment is 112% Mark 2 use a valid strategy to find 1% or 10% etc Mark 3 calculate answer correctly 2 marks will be given for assuming that 88% = £145.60 so 100% = £165.45 No marks will be given for subtracting 12% from her payment	112% = £145.60 1% = £145.60 ÷ 112 **£130** (145.60 − 17.47 = £128.13)	3
2	Mark 1 know that current value is 95% Mark 2 use a valid strategy to find 1% or 10% etc Mark 3 calculate answer correctly 2 marks will be given for assuming that 105% = £16720 so 100% = £15923.81 No marks will be given for adding 5% to the current value (16720 + 836 = £17556)	95% = £16720 1% = £16720 ÷ 95 **£17600**	3
2	Mark 1 know that the current payment is 85% Mark 2 use a valid strategy to find 1% or 10% etc Mark 3 calculate answer correctly 2 marks will be given for assuming that 115% = £306 so 100% = 266.09 No marks will be given for adding 15% to £306 (306 + 45.90 = £351.90)	85% = £306 1% = £306 ÷ 85 **£360**	3
4	Mark 1 know that tickets sold are 92% Mark 2 use a valid strategy to find 1% or 10% etc Mark 3 calculate answer correctly 2 marks will be given for assuming that 108% = 552000 so 100% = 511111 No marks will be given for adding 8% to 552000 (596160 tickets)	92% = 552 000 1% = 552 000 ÷ 92 **600 000**	3
5	Mark 1 know that the current payment is 103.5% Mark 2 use a valid strategy to find 1% or 10% etc Mark 3 calculate answer correctly 2 marks will be given for assuming that 96.5% = £465.75 so 100% = £482.64 No marks will be given for subtracting 3.5% from his bill (465.75 − 16.30 = £449.45)	103.5% = £465.75 1% = £465.72 ÷ 1035 **£450**	3