MASTERS

Homework 1

1 X=2500 to the nearest 100. Write down which one of these numbers could have not been x. 2450, 2449, 2495, 2499 2 Simplify 2w-2x+3w-5x+x² 3 DVDs are £5 each and have a buy one get one free offer. How many DVDs can you get for £35 4 Work out 258% of 6300 5 Toilet rolls are sold in packs of 4 for £1.89 and 9 for £3.99 Which pack is better value? 6 Calculate $\frac{3}{5}$ of 200 7 What is the probability of rolling a 5 on an ordinary fair dice 8 Write down all the factors of 18 9 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? 10 A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get? Total out of 10	Q	Question	Answer
numbers could have not been x. 2450, 2449, 2495, 2499 2 Simplify 2w-2x + 3w - 5x + x² 3 DVDs are £5 each and have a buy one get one free offer. How many DVDs can you get for £35 4 Work out 258% of 6300 5 Toilet rolls are sold in packs of 4 for £1.89 and 9 for £3.99 Which pack is better value? 6 Calculate $\frac{3}{5}$ of 200 7 What is the probability of rolling a 5 on an ordinary fair dice 8 Write down all the factors of 18 9 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? 10 A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?	1	X=2500 to the nearest 100.	
2450, 2449, 2495, 2499 2 Simplify 2w-2x+3w-5x+x² 3 DVDs are £5 each and have a buy one get one free offer. How many DVDs can you get for £35 4 Work out 258% of 6300 5 Toilet rolls are sold in packs of 4 for £1.89 and 9 for £3.99 Which pack is better value? 6 Calculate ³ / ₅ of 200 7 What is the probability of rolling a 5 on an ordinary fair dice 8 Write down all the factors of 18 9 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? 10 A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?		Write down which one of these	
2 Simplify 2w -2x + 3w - 5x + x² 3 DVDs are £5 each and have a buy one get one free offer. How many DVDs can you get for £35 4 Work out 258% of 6300 5 Toilet rolls are sold in packs of 4 for £1.89 and 9 for £3.99 Which pack is better value? 6 Calculate $\frac{3}{5}$ of 200 7 What is the probability of rolling a 5 on an ordinary fair dice 8 Write down all the factors of 18 9 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? 10 A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?		numbers could have not been x.	
2w -2x + 3w - 5x + x ² 3 DVDs are £5 each and have a buy one get one free offer. How many DVDs can you get for £35 4 Work out 258% of 6300 5 Toilet rolls are sold in packs of 4 for £1.89 and 9 for £3.99 Which pack is better value? 6 Calculate $\frac{3}{5}$ of 200 7 What is the probability of rolling a 5 on an ordinary fair dice 8 Write down all the factors of 18 9 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? 10 A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?		2450, 2449, 2495, 2499	
DVDs are £5 each and have a buy one get one free offer. How many DVDs can you get for £35 Work out 258% of 6300 Toilet rolls are sold in packs of 4 for £1.89 and 9 for £3.99 Which pack is better value? Calculate $\frac{3}{5}$ of 200 What is the probability of rolling a 5 on an ordinary fair dice Write down all the factors of 18 Write down all the factors of 18 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?	2	Simplify	
one get one free offer. How many DVDs can you get for £35 Work out 258% of 6300 Toilet rolls are sold in packs of 4 for £1.89 and 9 for £3.99 Which pack is better value? Calculate $\frac{3}{5}$ of 200 What is the probability of rolling a 5 on an ordinary fair dice Write down all the factors of 18 Write down all the factors of 18 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?		$2w - 2x + 3w - 5x + x^2$	
DVDs can you get for £35 Work out 258% of 6300 Toilet rolls are sold in packs of 4 for £1.89 and 9 for £3.99 Which pack is better value? Calculate \$\frac{3}{5}\$ of 200 What is the probability of rolling a 5 on an ordinary fair dice Write down all the factors of 18 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?	3	DVDs are £5 each and have a buy	
 Work out 258% of 6300 Toilet rolls are sold in packs of 4 for £1.89 and 9 for £3.99 Which pack is better value? Calculate ³/₅ of 200 What is the probability of rolling a 5 on an ordinary fair dice Write down all the factors of 18 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get? 		one get one free offer. How many	
Toilet rolls are sold in packs of 4 for £1.89 and 9 for £3.99 Which pack is better value? Calculate \$\frac{3}{5}\$ of 200 What is the probability of rolling a 5 on an ordinary fair dice Write down all the factors of 18 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?		DVDs can you get for £35	
f1.89 and 9 for £3.99 Which pack is better value? Calculate $\frac{3}{5}$ of 200 What is the probability of rolling a 5 on an ordinary fair dice Write down all the factors of 18 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?	4	Work out 258% of 6300	
f1.89 and 9 for £3.99 Which pack is better value? Calculate $\frac{3}{5}$ of 200 What is the probability of rolling a 5 on an ordinary fair dice Write down all the factors of 18 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?			
f1.89 and 9 for £3.99 Which pack is better value? Calculate $\frac{3}{5}$ of 200 What is the probability of rolling a 5 on an ordinary fair dice Write down all the factors of 18 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?			
Which pack is better value? Calculate $\frac{3}{5}$ of 200 What is the probability of rolling a 5 on an ordinary fair dice Write down all the factors of 18 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?	5	Toilet rolls are sold in packs of 4 for	
 Calculate ³/₅ of 200 What is the probability of rolling a 5 on an ordinary fair dice Write down all the factors of 18 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get? 		£1.89 and 9 for £3.99	
7 What is the probability of rolling a 5 on an ordinary fair dice 8 Write down all the factors of 18 9 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? 10 A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?		Which pack is better value?	
7 What is the probability of rolling a 5 on an ordinary fair dice 8 Write down all the factors of 18 9 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? 10 A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?	6	Calculate $\frac{3}{2}$ of 200	
on an ordinary fair dice Write down all the factors of 18 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?		5	
on an ordinary fair dice Write down all the factors of 18 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?	7	What is the probability of rolling a 5	
Write down all the factors of 18 9 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? 10 A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?			
9 A hotel charges £69 to stay per night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? 10 A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?		on an oramary ran aree	
night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?	8	Write down all the factors of 18	
night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?			
night, £5.99 for breakfast, £9.95 for an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?			
an evening meal. Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?	9	A hotel charges £69 to stay per	
Jack stays for 4 nights, has 3 breakfasts and 2 evening meals. How much does he pay altogether? A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?		night, £5.99 for breakfast, £9.95 for	
breakfasts and 2 evening meals. How much does he pay altogether? A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?		an evening meal.	
How much does he pay altogether? A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?		Jack stays for 4 nights, has 3	
A lottery win is split between Ben, Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?		breakfasts and 2 evening meals.	
Amaan and Sophie in the ratio 2:3:5. What fraction of the win does Amaan get?		How much does he pay altogether?	
What fraction of the win does Amaan get?	10	A lottery win is split between Ben,	
Amaan get?		Amaan and Sophie in the ratio 2:3:5.	
		What fraction of the win does	
Total out of 10		Amaan get?	
l l	Tot	al out of 10	

Homework 2

Q	Question	Answer
1	X=2550 to the nearest 10.	
	Write down which one of these	
	numbers could have not been x.	
	2552, 2549.5, 2555, 2548	
2	Solve	
	2(w+5)=14	
3	DVDs are £7 each and have a buy 2	
	get one free offer. How many DVDs	
	can you get for £50	
4	Work out 169% of 5200	
5	Toilet rolls are sold in packs of 4 for	
	£6 and 7 for £10.43	
	Which pack is better value?	
6	Calculate $\frac{7}{9}$ of 108	
	,	
7	What is the probability of rolling a	
	prime number on an ordinary fair	
	dice	
8	Write down the LCM of 9 and 12	
9	A hotel charges £59 to stay per	
	night, £6.99 for breakfast, £11.95 for	
	an evening meal.	
	Olivia stays for 3 nights, has 3	
	breakfasts and 2 evening meals. She	
	is charged £233.82. Is this correct	
	and if not what might the error be?	
10	A lottery win is split between Ben,	
	Amaan and Sophie in the ratio 3:4:1.	
	What fraction of the win does Sophie	
	get?	
Tot	al out of 10	

Q	Question	Answer
1	X=12.2 to 1dp.	
	Write down which one of these	
	numbers could have not been x.	
	12.249, 12.1499, 12.1984, 12.235	
2	Solve	
	3(2x-3)=9	
3	Apples are 55p and pears are 60p.	
	Adam needs 7 apples and 5 pears.	
	How much change will he get from a	
	£10 note? List the change he will get	
	using the lowest number of coins.	
4	Work out 38% of 78200	
5	Perfume is sold for 40ml for £49.50	
	and 75ml for £93.	
	Which bottle is better value?	
6	Calculate $\frac{2}{7}$ of 147	
	/	
7	Which is more likely; rolling an odd	
	number or rolling a factor of 12 on a	
	fair 6 sided dice	
8	Represent 195 as a product of prime	
	factors	
9	An electricity meter measured	
	1200units at the beginning of the	
	month and 1524units at the end.	
	Electricity costs 10p per unit	
	How much is the bill for the month?	
10	A lottery win is split between Ben,	
	Amaan and Sophie in the ratio 6:7:9.	
	What fraction of the win does Ben	
	get, simplify your answer?	
Tot	al out of 10	

Q	Question	Answer
1	Round 2437.89 to 3 significant	
	figures	
2	Solve	
	5(4x+3)=135	
3	Ashley is saving up to buy a	
	mountain bike that costs £250. He	
	baby-sits each week for 6 hours for	
	£4.50 an hour, and works on a	
	Saturday for £33. He saves ¾ of his	
	weekly earnings. How many weeks	
	will it take him to save up for his	
	bike?	
4	Work out 154% of 78200	
5	A supermarket sells bottled water in	
	three sizes	
	400ml for 38p, 2l for 98p or 5l for	
	£2.50.	
	Which bottle is better value?	
6	Calculate $\frac{5}{9}$ of 153	
	,	
7	Which is more likely; rolling a prime	
	number or rolling a factor of 9 on a	
	fair 6 sided dice	
8	Represent 220 as a product of prime	
	factors	
9	An electricity meter measured	
	1223units at the beginning of the	
	month and 1638 units at the end.	
	Electricity costs 12p per unit	
10	How much is the bill for the month?	
10	A length of wood is cut into two	
	pieces in the ratio 3:7. What fraction	
	of the original length is the shorter	
<u> </u>	piece?	
Tot	al out of 10	

Q	Question	Answer
1	Order these decimals from largest to	
	smallest	
	1.29, 1.189, 1.289, 1.100001	
2	Solve	
	4(5t+8)=12	
3	Jemma is saving up to buy a	
	mountain bike that costs £330. She	
	baby-sits each week for 7 hours for	
	£5.75 an hour, and works on a	
	Saturday for £24.25. She saves 4/5	
	of her weekly earnings. How many	
	weeks will it take her to save up for	
	her bike?	
4	Work out 22.5% of 600	
5	A supermarket sells boxes of corn	
	flakes in two sizes;	
	750g for £1.64 and 0.5kg for £1.10	
	Which box is better value?	
6	Calculate $\frac{2}{3}$ of 147	
	3	
7	Which is more likely; rolling an odd	
	number or rolling a number less	
	than 3 on a fair 6 sided dice	
8	Represent 50 as a product of prime	
	factors	
9	There are 48 cans of soup on a crate.	
	A supermarket has a delivery of 110	
	crates for £1980 and sells a can for	
	41p. How much profit does the	
	supermarket make on the delivery?	
10	Divide £240 in the ratio 3:5:12	
Tot	al out of 10	

Q	Question	Answer
1	X=1200 to 2sf.	
	Write down which one of these	
	numbers could have not been x.	
	1151, 12491, 1189.29, 1249	
2	Solve	
	2x+3=x+5	
3	John buys a mountain bike. He pays	
	a deposit of 10% of the cash price	
	followed by 24 monthly payments of	
	£15. In total he pays £395. What	
	was the cash price of the bike?	
4	Work out 27.5% of 200	
5	Mary and Hannah are arguing over	
	who is better at maths.	
	Mary scored 49/80 on a test and	
	Hannah scored 60/100 on a test of	
	the same standard. Who did better?	
6	Calculate $\frac{3}{8}$ of 96	
	δ	
7	Which is more likely; rolling square	
	number or rolling a multiple of 3 on	
	a fair 6 sided dice	
	a fair o sided dice	
8	Represent 50 ² as a product of prime	
	factors	
9	There are 36 cans of soup on a crate.	
	A supermarket has a delivery of 92	
	crates for £1250.10 and sells a can	
	for 43p. How much profit does the	
	supermarket make on the delivery?	
10	Rewrite the following scale as a	
	ratio, as simply as possible;	
	1cm to 0.25m	
Tot	al out of 10	

Q	Question	Answer
1	Round 12.39 to 3 significant figures	
2	Solve	
	8k+-1=6k-5	
3	Alia buys a mountain bike. She pays	
	a deposit of 10% of the cash price	
	followed by 36 monthly payments of	
	£12.50. In total she pays £495.	
	What was the cash price of the bike?	
4	Work out 115% of 240	
5	A supermarket sells shampoo in two	
	sizes;	
	Bottle containing 400ml for £1.15	
	and a 550ml bottle for £1.60.	
	Which bottle is the best value?	
6	Calculate $\frac{1}{6}$ of 144	
	o de la companya de	
7	Which is more likely; rolling a	
	number greater than 5 or rolling a	
	prime number on a fair 6 sided dice	
8	Represent 84 ² as a product of prime	
	factors	
9	A first-class letter costs 55p to post	
	and a second class letter costs 32p.	
	What change will I receive after	
	paying with £20 note for 12 first	
	class and 19 second class letters?	
10	Rewrite the following scale as a	
	ratio, as simply as possible;	
	2cm to 5km	
Tot	al out of 10	