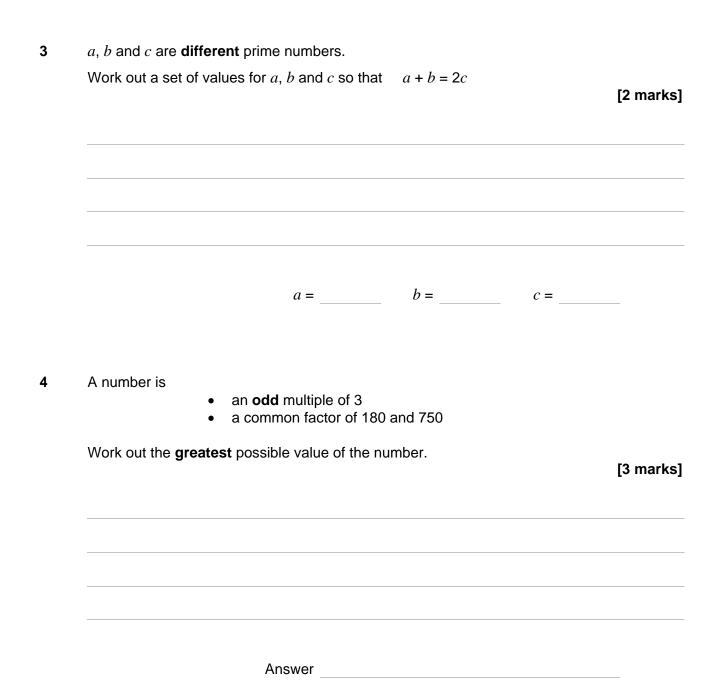


Topic Test 1 (20 minutes)

Factors and multiples - Higher

1		$= 3^2 \times 5 \qquad y = 2 \times 5^2$ ircle the lowest common multiple of <i>x</i> and <i>y</i> .			
	5	30	450	2250	[1 mark]
2 (a)	Write 280 as a produc	ct of its prime factors			[2 marks]
2 (b)	588 = $2^2 \times 3 \times 7^2$ Work out the highest common factor of 280 and 588				[2 marks]
		Answer			



5	$x = 2^2 \times 5^2 \times 11^4$				
	Circle the square root	of <i>x</i> .			[1 mark]
	110	128	1210	732 050	
6	a and b are two number a is a prime number a	mber.	00		
	<i>b</i> is three times <i>a</i> . Work out the smallest and largest possible values of $a + b$				
					[3 marks]
		Smallest			
		Largest			

7	Which of these is not a square number?							
	Circle your answer.							
					[1 mark]			
	2 ² × 4 ³	$2^2 \times 8^3$	$2^2 \times 5^4$	$2^2 \times 3^2 \times 5^2$				
8	A menu has 8 starters	6 main courses an	d 6 desserts					
0	A menu has 8 starters, 6 main courses and 6 desserts. Beth wants a starter and a main course. Chen wants a main course and a dessert.							
	How many more possible combinations can Beth have than Chen?							
		Answer						
9	A padlock has a four-digit code.							
	Each digit can be 1, 2, 3, 4, 5 or 6							
	For example,							
	3 6 6 2							
	The fourth digit must be an even number.							
	How many possible codes are there?							
		Answer						