

FACTORS, MULTIPLES and PRIMES

Page	Description
1	Find multiples of the numbers 2 to 9
2	Find factors of the numbers 2 to 20
3	Recap on factors of the numbers 2 to 20. Which ones are prime?
4	Use a Venn Diagram to find the highest common factor
5	Venn diagram using factors and multiples
6	Find the highest common factor and lowest common multiple

Find all the times a number is written in the main part of the grid to find all the factors of that number. 6 has been done for you

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32				
	3	6	9	12	15	18	21	24	27	30	33									
	4	8	12	16	20	24	28	32												
	5	10	15	20	25	30	35													
	6	12	18	24	30	36														
	7	14	21	28	35															
	8	16	24	32																
	9	18	27	36																
	10	20	30	40																
	11	22	33																	
	12	24	36																	
	13	26	39																	
	14	28	42																	
	15	30	45																	
	16	32																		
	17	34																		
	18	36																		
	19	38																		
	20	40																		

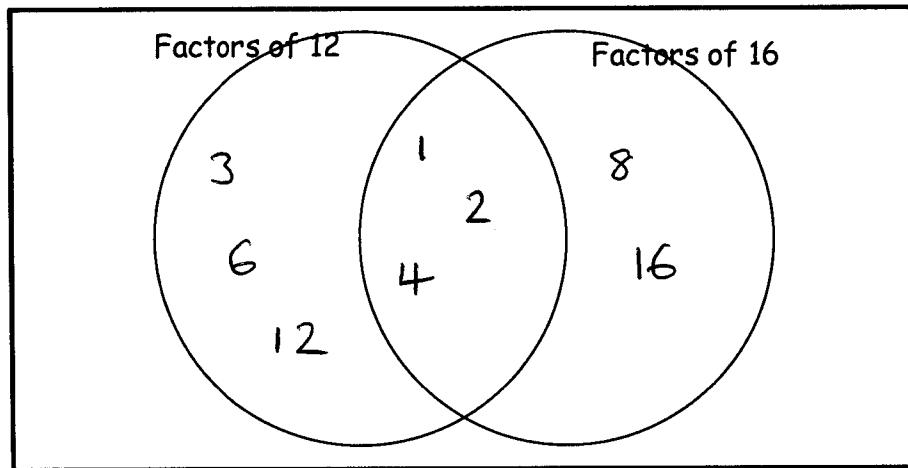
FACTORS of

2	1, 2
3	1, 3
4	1, 2, 4
5	1, 5
6	1 x 6 and 2 x 3. Factors are 1, 2, 3 and 6
7	1, 7
8	1, 2, 4, 8
9	1, 3, 9
10	1, 2, 5, 10
11	1, 11
12	1, 2, 3, 4, 6, 12
13	1, 13
14	1, 2, 7, 14
15	1, 3, 5, 15
16	1, 2, 4, 8, 16
17	1, 17
18	1, 2, 3, 6, 9, 18
19	1, 19
20	1, 2, 4, 5, 10, 20

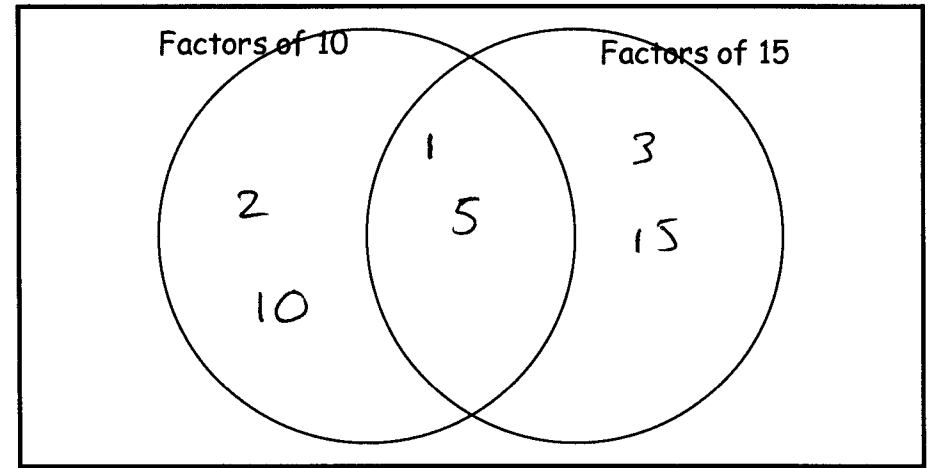
②

		Factors																			Number of factors	Prime		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19			20	
Number	1	1																				1		
	2	1	2																				2	yes
	3	1		3																			2	yes
	4	1	2		4																		3	
	5	1				5																	2	yes
	6	1	2	3			6																4	
	7	1						7															2	yes
	8	1	2		4					8													4	
	9	1		3							9												3	
	10	1	2			5						10											4	
	11	1											11										2	yes
	12	1	2	3	4		6							12									6	
	13	1													13								2	yes
	14	1	2						7							14							4	
	15	1		3		5											15						4	
	16	1	2		4					8								16					5	
	17	1																		17			2	yes
	18	1	2	3			6				9										18		6	
	19	1																				19	2	yes
	20	1	2		4	5						10											6	

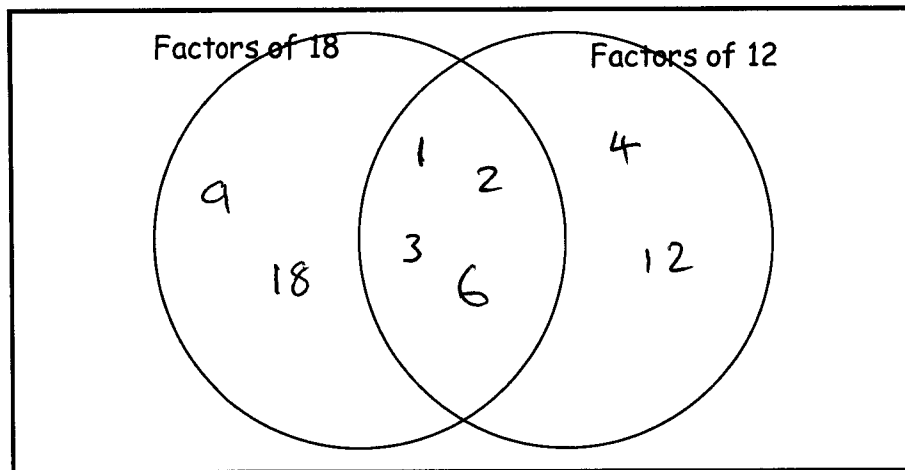
Complete the Venn Diagrams by writing in all the factors



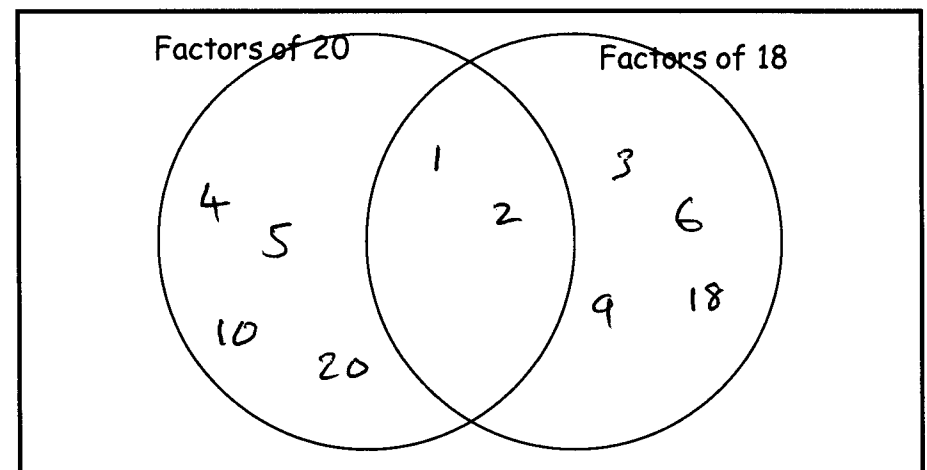
What is the highest number that is a factor of both 12 and 16? 4



What is the highest number that is a factor of both 10 and 15? 5



What is the highest number that is a factor of both 12 and 18? 6

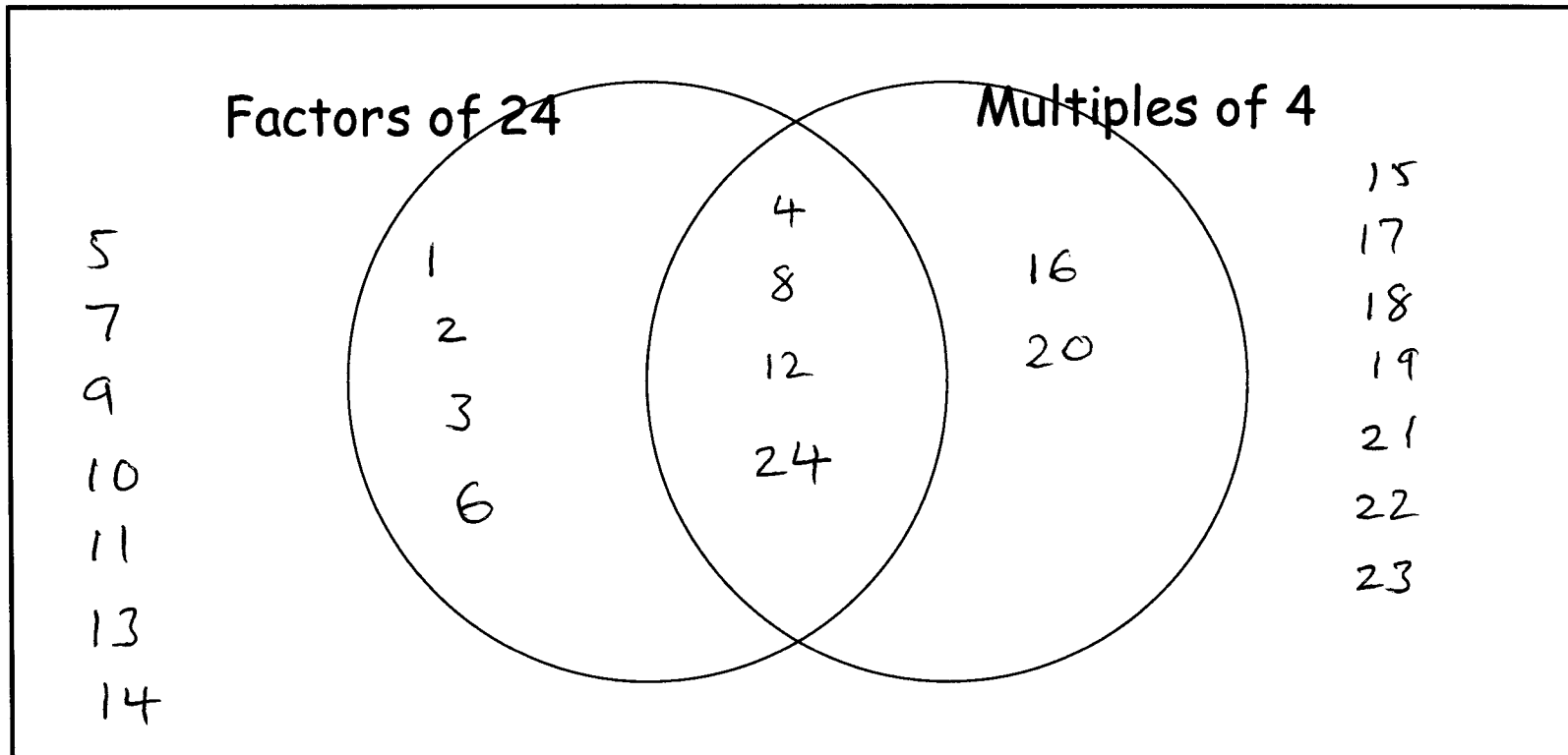


What is the highest number that is a factor of both 20 and 18?

4

1 2 3 4 5 6 7 8 9 10 11 12

13 14 15 16 17 18 19 20 21 22 23 24



(5)

Highest Common Factor (HCF) and Lowest Common Multiple (LCM)

Qu.	Numbers	HCF	LCM
1	4 and 6	2	12
2	9 and 12	3	36
3	7 and 10	1	70
4	5 and 8	1	40
5	8 and 16	8	16
6	12 and 18	6	36
7	20 and 24	4	120
8	10 and 12	2	60
9	2, 3 and 5	1	30
10	4, 6 and 8	2	24

6