Challenge 1

Can you continue the pattern to 100 and describe what is happening?

17 + 3 = 20

27 + 3 =

Why does this happen?

Can you make a rule about what happens when you add numbers with 7 ones and numbers with 3 ones?

Challenge 2

Can you continue the pattern to 10 and describe what is happening?

100 - 5 = 95

90 – 5 =

80 - 5 =

Why does this happen?

Can you make a rule about what happens when you subtract a number with 5 ones from a multiple of 10?

Challenge 3	*	
How quickly can you complete these calculations?		
8 + 2 =	68 + 2 =	
18 + 2 =	78 + 2 =	
28 + 2 =	88 + 2 =	
38 + 2 =	98 + 2 = <u>8*2</u> *20	
48 + 2 =		
58 + 2 =		

Challenge 4

How quickly can you complete these calculations?

95 - 3 =	35 - 3 =
85 - 3 =	25 - 3 =
75 - 3 =	15 - 3 =
65 - 3 =	5 - 3 =
55 - 3 =	
45 – 3 =	



Speed It Up Challenge Cards Answers

Challenge 1	Challenge 2	Challenge 3	Challenge 4
7 + 3 = 10	100 - 5 = 95	8 + 2 = 10	95 – 3 = 92
17 + 3 = 20	90 - 5 = 85	18 + 2 = 20	85 - 3 = 82
27 + 3 = 30	80 - 5 = 75	28 + 2 = 30	75 – 3 = 72
37 + 3 = 40	70 – 5 = 65	38 + 2 = 40	65 - 3 = 62
47 + 3 = 50	60 - 5 = 55	48 + 2 = 50	55 – 3 = 52
57 + 3 = 60	50 – 5 = 45	58 + 2 = 60	45 – 3 = 42
67 + 3 = 70	40 - 5 = 35	68 + 2 = 70	35 – 3 = 32
77 + 3 = 80	30 – 5 = 25	78 + 2 = 80	25 – 3 = 22
87 + 3 = 90	20 – 5 = 15	88 + 2 = 90	15 – 3 = 12
97 + 3 = 100	10 - 5 = 5	98 + 2 = 100	5 – 3 = 2
If I have 7 ones and I add 3 ones, I will always make a multiple of ten because 7 and 3 make 10.	5 + 5 = 10 so 10 – 5 = 5 If I take away 5 from any multiple of 10, the answer will always have 5 ones.	I was quick because if I have 8 ones and I add 2 ones, I will always make a multiple of ten because 8 + 2 = 10.	I was quick because if I have 5 ones and I subtract 3 ones, the number will always have 2 ones because 5 – 3 = 2.





Challenge 1

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Can you continue the pattern and describe what is happening?

98 - 4 = 68 - 4 = 38 - 4 = 8 - 4 =

88 - 4 = 58 - 4 = 28 - 4 =

78 - 4 = 48 - 4 = 18 - 4 =

Why does this happen?

Can you make a rule about what happens when you subtract a number with 8 ones from a number with 4 ones?

Challenge 2

How quickly can you complete these calculations?

2 + 6 =	42 + 6 =	82 + 6 =
12 + 6 =	52 + 6 =	92 + 6 =
22 + 6 =	62 + 6 =	
32 + 6 =	72 + 6 =	8*4
	Were you quick Can you explain w	? /hy?

Challenge 3

How quickly can you complete these calculations?

99 - 6 =	59 - 6 =	19 - 6 =
89 - 6 =	49 - 6 =	9 - 6 =
79 - 6 =	39 - 6 =	
69 - 6 =	29 - 6 =	8

Were you quick? Can you explain why?



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Challenge 4

Start at 100 and take away 5 repeatedly until you get to zero. Can you describe the pattern and explain what you notice?

Start at 98 and take away 5 for as long as you can. Can you describe the pattern and explain what you notice?

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Speed It Up Challenge Cards Answers

Challenge 1	Challenge 2	Challenge 3	Challenge 4
98 - 4 = 94	2 + 6 = 8	99 - 6 = 93	100, 95, 90, 85, 80, 75, 70,
88 - 4 = 84	12 + 6 = 18	89 - 6 = 83	65, 60, 55, 50, 45, 40, 35, 30, 25, 20, 15, 10, 5, 0
78 – 4 = 74	22 + 6 = 28	79 - 6 = 73	I'm starting with a multiple
68 - 4 = 64	32 + 6 = 38	69 - 6 = 63	of 5 and subtracting 5,
58 - 4 = 54	42 + 6 = 48	59 - 6 = 53	so the pattern follows multiples of 5
48 - 4 = 44	52 + 6 = 58	49 - 6 = 43	multiples of 5.
38 - 4 = 34	62 + 6 = 68	39 - 6 = 33	08 03 88 83 78 73 68
28 - 4 = 24	72 + 6 = 78	29 - 6 = 23	63, 58, 53, 48, 43, 38, 33, 28, 23, 18, 13, 8, 3
18 - 4 = 14	82 + 6 = 88	19 - 6 = 13	
8 - 4 = 4	92 + 6 = 98	9 - 6 = 3	I'm not starting on a multiple of 5 but
All of these calculations subtract 4 ones from 8 ones. I know 8 – 4 = 4, so these answers all have 4 ones.	There are the same number of ones in each calculation. I know that 2 ones and 6 ones make 8 ones, so the answers will all have 8 ones.	All of these calculations subtract 6 ones from 9 ones. I know that 9 - 6 = 3, so these answers all have 3 ones.	I'm subtracting 5 each time. So instead of multiples of 5, I get a repeating pattern of 8.





Challenge 1

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Take a pack of digit cards. Start at zero and add each number as you turn it over.

Can you use your number facts to help you?



Challenge 2

Take a pack of digit cards. Start at 100 and subtract each number as you turn it over.

Can you use your number facts to help you?



Challenge 3

How quickly can you complete these calculations?

- 3 + 4 =
- 13 + 4 =
- 23 + 4 =

Continue the pattern.

Make a rule about what you notice.

Now, make up one of your own for a friend to try.

8=2=10

Challenge 4

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8*2=10

How quickly can you complete these calculations?

96 - 5 =

86 - 5 =

Continue the pattern.

Make a rule about what you notice.

What would happen if you subtracted 15 each time? Now make up one of your own.

Speed It Up Challenge Cards Answers

Challenge 3	Challenge 4	
3 + 4 = 7	96 - 5 = 91	96 - 15 = 81
13 + 4 = 17	86 - 5 = 81	86 - 15 = 71
23 + 4 = 27	76 – 5 = 71	76 - 15 = 61
33 + 4 = 37	66 - 5 = 61	66 - 15 = 51
43 + 4 = 47	56 - 5 = 51	56 - 15 = 41
53 + 4 = 57	46 - 5 = 41	46 - 15 = 31
63 + 4 = 67	36 - 5 = 31	36 - 15 = 21
73 + 4 = 77	26 - 5 = 21	26 - 15 = 11
83 + 4 = 87	16 - 5 = 11	16 - 15 = 1
93 + 4 = 97	6 - 5 = 1	The ones have the same
I was always adding 3 ones to 4 ones, so the answer would always have 7 ones.	If I start with 6 ones and take away 5 ones, my answers will have 1 one.	pattern, but I take away ten as well.
	Challenge 3 3 + 4 = 7 13 + 4 = 17 23 + 4 = 27 33 + 4 = 37 43 + 4 = 47 53 + 4 = 57 63 + 4 = 57 63 + 4 = 67 73 + 4 = 77 83 + 4 = 87 93 + 4 = 97 I was always adding 3 ones to 4 ones, so the answer would always have 7 ones.	Challenge 3 $3 + 4 = 7$ Challenge 4 $96 - 5 = 91$ $13 + 4 = 17$ $86 - 5 = 91$ $13 + 4 = 17$ $86 - 5 = 81$ $23 + 4 = 27$ $76 - 5 = 71$ $33 + 4 = 37$ $66 - 5 = 61$ $43 + 4 = 47$ $56 - 5 = 51$ $53 + 4 = 57$ $46 - 5 = 41$ $63 + 4 = 67$ $36 - 5 = 31$ $73 + 4 = 77$ $26 - 5 = 21$ $83 + 4 = 87$ $16 - 5 = 11$ $93 + 4 = 97$ $6 - 5 = 1$ I was always adding 3 ones to 4 ones, so the answer would always have 7 ones.If I start with 6 ones and take away 5 ones, my answers will have 1 one.

