AC
EA
AA
AM
AP

Decimal Fractions (hundredths)

Jumping the number line

We are learning to jump through a whole number on a number line to solve problems like 1.93 + □ = 9.14 or 2.89 + □ = 10.3.

Exercise 1

Tiare worked out how to find 5 + □ = 8.32 by saying to herself 5 + 3 gives 8, 8 + 0.32 is 8.32 so the answer is 3 + 0.32, which is 3.32. Use Tiare's method to work these out.

1)	6 + □ = 8.55	(2)	6 + □ = 9.73	(3)	5 + □ = 7.64
4)	1 + □ = 5.87	(5)	1 + □ = 8.15	(6)	2 + □ = 8.93
7)	6 + □ = 9.76	(8)	2 + □ = 10.52	(9)	5 + □ = 7.38
10)	7 + □ = 10.18	(11)	5 + □ = 7.56	(12)	3 + □ = 9.91
13)	2 + □ = 8.44	(14)	3 + □ = 9.65	(15)	9 + □ = 12.67
16)	8 + □ = 12.65	(17)	10 + □ = 15.83	(18)	11 + □ = 14.28

Exercise 2

Amber worked out 4.97 + □ = 8.12 like this:
4.97 + 0.03 = 5, and she wrote down 0.03
5 + 3 = 8, and she wrote down 3
8 + 0.12 = 8.12, and she wrote down 0.12.
Amber's answer was 3.15. Use Amber's answer to work these out. Do writing like Amber's in your maths book if that helps you.

Writing in Amber's book.
0.03 + 3 + 0.12 = 3.15

1)	6.93 + □ = 8.51	(2)	4.98 + □ = 9.43	(3)	5.97 + □ = 7.74
4)	2.95 + □ = 5.24	(5)	6.98 + □ = 8.35	(6)	2.94 + □ = 9.23
7)	5.97 + □ = 9.01	(8)	8.93 + □ = 10.72	(9)	4.96 + □ = 8.62
10)	9.99 + □ = 15.48	(11)	2.98 + □ = 8.46	(12)	5.93 + □ = 9.71

Exercise 3

Hazel worked out 3.98 + □ = 9.3 using only two steps:
3.98 + 0.02 = 4, and she wrote down 0.02
4 + 5.3 = 9.3, and she wrote down 5.3.
Hazel's answer was 5.32. Use Hazel's answer to work these out. Do writing like Hazel's in your maths book if that helps you.

Writing in Hazel's book.
0.02 + 5.3 = 5.32

1)	1.92 + □ = 8.3	(2)	7.98 + □ = 10.3	(3)	3.97 + □ = 7.2
4)	2.93 + □ = 10.2	(5)	3.94 + □ = 9.1	(6)	11.99 + □ = 18.5
7)	14.98 + □ = 19.1	(8)	4.95 + □ = 9.2	(9)	14.96 + □ = 29.2
10)	9.94 + □ = 35.2	(11)	2.97 + □ = 18.4	(12)	6.98 + □ = 18.1

Exercise 4

Jack worked out 4.97 + □ = 18.45 using two steps:
4.97 + 0.03 = 5, and she wrote down 0.03
4 + 14.45 = 18.45, and she wrote down 14.45.
Jack's answer was 14.48. Use Jack's method to work these out. Do writing like Jack's in your maths book if that helps you.

Writing in Jack's book.
0.03 + 14.45 = 14.48

1)	1.92 + □ = 7.51	(2)	2.98 + □ = 10.55	(3)	13.97 + □ = 17.62
4)	12.93 + □ = 29.21	(5)	3.94 + □ = 29.13	(6)	11.99 + □ = 38.56
7)	14.98 + □ = 47.14	(8)	4.95 + □ = 95.23	(9)	14.96 + □ = 85.63
10)	9.94 + □ = 35.32	(11)	12.97 + □ = 78.54	(12)	16.98 + □ = 78.87

Exercise 5

Here are some more challenging problems. Have a go at them. Solve them mentally, but record enough on paper to show how you have done this.

1)	11.82 + □ = 38.3	(2)	17.78 + □ = 39.3	(3)	23.87 + □ = 67.6
4)	2.73 + □ = 18.2	(5)	3.84 + □ = 19.1	(6)	31.79 + □ = 78.5
7)	14.88 + □ = 39.5	(8)	4.75 + □ = 96.2	(9)	14.86 + □ = 58.2
10)	9.84 + □ = 235.6	(11)	22.87 + □ = 138.4	(12)	76.78 + □ = 485.3

Exercise 6

And yet more challenging problems. Try to solve them mentally, but record enough on paper to show how you have done this.

1)	19.88 + ☐ = 224.52	(2)	29.79 + ☐ = 343.37	(3)	32.86 + ☐ = 87.31
4)	22.89 + ☐ = 54.26	(5)	35.88 + ☐ = 69.44	(6)	49.85 + ☐ = 150.42
7)	59.76 + ☐ = 192.12	(8)	99.89 + ☐ = 259.23	(9)	50.75 + ☐ = 89.23
10)	99.83 + ☐ = 853.21	(11)	99.74 + ☐ = 187.41	(12)	53.83 + ☐ = 78.61

Exercise 7

Just for fun. Try to solve them mentally, but record enough on paper to show how you have done this.

1)	129.88 + ☐ = 254.52	(2)	15.78 + ☐ = 58.3	(3)	116.98 + ☐ = 278.87
4)	202.97 + ☐ = 518.2	(5)	999.89 + ☐ = 3465.4		
6)	9999.76 + ☐ = 10 052.65				

Jumping the number line – decimal fractions (hundredths)
Answers

Exercise 1

1)	2.55	(2)	3.73	(3)	2.64	(4)	4.87
5)	7.15	(6)	6.93	(7)	3.76	(8)	8.52
9)	2.38	(10)	3.18	(11)	2.56	(12)	6.91
13)	6.44	(14)	6.65	(15)	3.67	(16)	4.65
17)	5.83	(18)	3.28				

Exercise 2

1)	0.07 + 1 + 0.51 = 1.58	(2)	0.02 + 4 + 0.43 = 4.45
3)	0.03 + 1 + 0.74 = 1.77	(4)	0.05 + 2 + 0.24 = 2.29
5)	0.02 + 1 + 0.35 = 1.37	(6)	0.06 + 6 + 0.23 = 6.29
7)	0.03 + 3 + 0.01 = 3.04	(8)	0.07 + 1 + 0.72 = 1.79
9)	0.04 + 3 + 0.62 = 3.66	(10)	0.01 + 5 + 0.48 = 5.49
11)	0.02 + 5 + 0.46 = 5.48	(12)	0.07 + 3+ 0.71 = 3.78

Exercise 3

1)	0.08 + 6.3 = 6.38	(2)	0.02 + 2.3 = 2.32
3)	0.03 + 3.2 = 3.23	(4)	0.07 + 7.2 = 7.27
5)	0.06 + 5.1 = 5.16	(6)	0.01 + 6.5 = 6.51
7)	0.02 + 4.1 = 4.12	(8)	0.05 + 4.2 = 4.25
9)	0.04 + 14.2 = 14.24	(10)	0.06 + 25.2 = 25.26
11)	0.03 + 15.4 = 15.43	(12)	0.02 + 11.1 = 11.12

Exercise 4

1)	0.08 + 5.51 = 5.59	(2)	0.02 + 7.55 = 7.57
3)	0.03 + 3.62 = 3.65	(4)	0.07 + 16.21 = 16.28
5)	0.06 + 25.13 = 25.19	(6)	0.01 + 26.56 = 26.57
7)	0.02 + 32.14 = 32.16	(8)	0.05 + 90.23 = 90.28
9)	0.04 + 70.63 = 70.67	(10)	0.06 + 25.32 = 25.38
11)	0.03 + 65.54 = 65.57	(12)	0.02 + 61.87 = 61.89

Exercise 5

1)	0.18 + 26.3 = 26.48	(2)	0.22 + 21.3 = 21.52
3)	0.13 + 43.6 = 43.73	(4)	0.27 + 15.2 = 15.47
5)	0.16 + 15.1 = 15.26	(6)	0.21 + 46.5 = 46.71
7)	0.12 + 24.5 = 24.62	(8)	0.25 + 91.2 = 91.45
9)	0.12 + 43.2 = 43.34	(10)	0.16 + 225.6 = 225.76
11)	0.13 + 115.4 = 115.53	(12)	0.22 + 408.3 = 408.52

Exercise 6

1)	0.12 + 204.52 = 204.64	(2)	0.21 + 313.37 = 313.58
3)	0.14 + 54.31 = 54.45	(4)	0.11 + 31.26 = 31.37

5) 0.12 + 33.44 = 33.56
(6) 0.15 + 100.42 = 100.57
7) 0.24 + 132.12 = 132.36
(8) 0.11 + 159.23 = 159.34
9) 0.25 + 38.23 = 38.48
(10) 0.17 + 753.21 = 753.38
11) 0.26 + 87.41 = 87.67
(12) 0.17 + 24.61 = 24.78

Exercise 7

1) 0.12 + 124.52 = 124.64
(2) 0.22 + 42.3 = 42.52
3) 0.02 + 161.87 = 161.89
(4) 0.03 + 315.2 =315.23
5) 0.11 + 2465.4 = 2465.51
(6) 0.24 + 52.65 = 52.89