Addition and Subtraction Strategies

AC
EA
AA
AM
AP

Don't Subtract – Add!

I know that problems like 34 + □ = 51 and 51 –34 have the same answer (reversability). I am practising this.

Ref: Book 5 Pg. 34

Exercise 1

Rangi solves 63 – 38 by seeing that 38 + □ = 63 has the same answer. He says the answer is 2 + 23 = 25.

For these problems rewrite as an addition problem and then use Rangi's addition method to work out these subtractions.

1)   42 – 29   (2)   51 – 38   (3)   63 – 29

4)   53 – 27   (5)   34 – 19   (6)   92 – 48

Exercise 2

Complete the table by
1)   writing the subtraction problem indicated by the words
2)   rewriting the subtraction problem as an addition problem
3)   using Rangi's addition method to work out these subtractions.
4)   The first one is done for you.

Word problem	Subtraction	Addition	Answer
Jill has $73 and she spends $28. How much money does she have left?	73 – 28	28 + □ = 73	45
Kepa caught 34 snapper. 18 of them were too small and had to be released. How many snapper did he get to keep?			
Sumara has $93. She buys a shirt for $49. How much money does Sumara now have?			
Pauline has 56 $2 movie discount vouchers to give away. At lunchtime she manages to give away 27. How many discount vouchers does she have left?			
Old MacDonald has 54 animals on his farm. 38 animals have four legs and the rest have two legs. How many animals have two legs?			
The warehouse had 104 ipods at the			

beginning of the week. By Friday they had sold 87. How many ipods are left on Friday?			
Kali has $144 in the bank. She withdraws $98. How much money does she now have left in the bank?			

Exercise 3

Use an addition method to work out these subtractions.

1) $82 - 28$ (2) $61 - 39$ (3) $43 - 28$

4) $51 - 27$ (5) $84 - 19$ (6) $73 - 47$

7) $92 - 68$ (8) $32 - 18$ (9) $62 - 27$

Exercise 4

Use an addition method to work out these subtractions.

1) $142 - 98$ (2) $131 - 99$ (3) $163 - 98$

4) $153 - 99$ (5) $134 - 97$ (6) $173 - 97$

Exercise 5

Use an addition method to work out these subtractions.

1) $181 - 138$ (2) $362 - 339$ (3) $443 - 428$

4) $541 - 518$ (5) $874 - 819$ (6) $791 - 757$

7) $293 - 258$ (8) $363 - 318$ (9) $683 - 629$

Exercise 6

Use an addition method to work out these subtractions.

1) $333 - 198$ (2) $423 - 299$ (3) $531 - 298$

4) $912 - 698$ (5) $841 - 599$ (6) $632 - 297$

7) $631 - 389$ (8) $372 - 288$ (9) $743 - 487$

Exercise 7

Use an addition method to work out these subtractions.

1) $831 - 569$ (2) $651 - 379$ (3) $841 - 467$

4) $333 - 158$ (5) $532 - 268$ (6) $322 - 248$

7) $752 - 267$ (8) $912 - 768$ (9) $623 - 249$

Exercise 8

Some of these word problems involve a subtraction.
1)   Write out each problem with numbers.
2)   For the problems that involve a subtraction show which ones are easy to do using an addition method.
3)   Find the answers to these ones only.
4)   For the other problems give a reason why you wouldn't use the method/strategy.

1)   Forest Gump has a box with 32 chocolates in it. He eats 17 chocolates. How many chocolates does Forest have left?
2)   Jack has $81 in his wallet. He buys 2 CDs for $68. How much money does Jack now have?
3)   Mary-Anne has $52 in her bank account. For her birthday she gets another $38 that she puts into her bank account. How much money does Mary-Anne now have in her bank account?
4)   Ake has 49 minutes left of her free calling time before the end of the month. She rings her friend and talks for 21 minutes. How much free calling time does she now have left?
5)   Bonnie baked 121 muffins for the school gala. Seventy-eight muffins were sold. How many muffins are remaining?
6)   Miss Martin has 72 drink bottles to give away as spot prizes on athletics day. By lunchtime she has given away 39 drink bottles. How many drink bottles remain to give away in the afternoon?
7)   On Monday morning Jack and Jill total up the number of text messages combined that they sent over the weekend. Jack sent 124 text messages and Jill sent 78 text messages. How many text messages did they send in total?
8)   A multisport race is 134 km long. There are three disciplines involved, running, cycling and kayaking. If there is 69 km of cycling, what distance is covered by running and kayaking?
9)   Jenna has $572 in her bank account. She withdraws $70. How much money is remaining in her bank account?
10)   Frank has $412 in his bank account. He withdraws $287. How much money is remaining in his bank account?

Don't Subtract – Add!
Answers

Exercise 1:
1) $29 + \square = 42$; 13   (2) $38 + \square = 51$; 13
3) $29 + \square = 63$; 34   (4) $27 + \square = 53$; 26
5) $19 + \square = 34$; 15   (6) $48 + \square = 92$; 44

Exercise 2
1) $34 - 18$; $18 + \square = 34$; 16   (2) $93 - 49$; $49 + \square = 93$; 44
3) $56 - 27$; $27 + \square = 56$; 29   (4) $54 - 38$; $38 + \square = 54$; 16
5) $104 - 87$; $87 + \square = 104$; 17   (6) $144 - 98$; $98 + \square = 144$; 46

Exercise 3
1)	54	(2)	22	(3)	15	(4)	24
5)	65	(6)	26	(7)	42	(8)	14
9)	35						

Exercise 4
1)	44	(2)	32	(3)	65	(4)	54
5)	37	(6)	76				

Exercise 5
1)	43	(2)	23	(3)	15	(4)	23
5)	55	(6)	34	(7)	35	(8)	45
9)	54						

Exercise 6
1)	35	(2)	124	(3)	233	(4)	214
5)	242	(6)	335	(7)	242	(8)	84
9)	256						

Exercise 7
1)	262	(2)	272	(3)	374	(4)	175
5)	264	(6)	74	(7)	485	(8)	144
9)	374						

Exercise 8

For these exercises, where the strategy was useful the worked answer is given. If the strategy was not useful a reason is given.

1) $32 - 17$; $17 + \square = 32$; 15   (2) $81 - 68$; $68 + \square = 81$; 13
3) $52 + 38$; addition problem
4) $49 - 21$; easier to do by subtracting tens, subtracting ones
5) $121 - 78$; $78 + \square = 121$; 43   (6) $72 - 39$; $39 + \square = 72$; 33
7) $124 + 78$; addition problem   (8) $134 - 69$; $69 + \square = 134$; 65
9) $572 - 70$; easier to do by subtracting 70
10) $412 - 287$; $287 + \square = 412$; 125