Addition and Subtraction Strategies

AC
EA
AA
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AP

Multiple Ways to Add and Subtract

I know that multiplication and division can be used to solve addition and subtraction problems. I am practising this.

Exercise 1

Nelson is using common factors to help solve addition and subtraction problems. To solve 27 + 45, Nelson did the following working:

27 + 45 = (3 x 9) + (5 x 9) = 8 x 9 = 72

Do the following problems using Nelson's method. Record the working in your book like Nelson has above.

1) $21 + 15$ (2) $42 + 48$ (3) $14 + 35$

4) $36 - 28$ (5) $50 - 15$ (6) $72 - 54$

7) $32 + 48 + 24$ (8) $49 + 35 + 21$ (9) $27 + 15 + 33$

10) $36 + 48 - 42$ (11) $35 + 25 - 15$ (12) $36 - 12 + 8$

13) $16 + 72 + 24 + 48$ (14) $14 + 49 + 28 + 56$

15) $27 + 12 + 24 + 33$ (16) $72 - 24 + 48 + 12$

17) $54 + 18 - 27 - 36$ (18) $44 + 12 - 28 + 16$

Exercise 2:

For these next sentences, copy out the question and then write down if it is true or false. If it is false, correct the sentence.

1) $36 + 24 - 27 = 11 \times 3$ (2) $60 + 25 - 45 = 8 \times 5$

3) $84 - 49 + 14 = 7 \times 2$ (4) $81 - 36 - 18 = 11 \times 9$

5) $4 + 48 + 36 = 22 \times 4$ (6) $66 - 48 + 24 = 3 \times 6$

7) $72 - 40 + 16 = 5 \times 8$ (8) $100 + 50 - 20 = 13 \times 10$

Multiple Ways to Add and Subtract
Answers

Exercise 1

1) $(7 \times 3) + (5 \times 3) = 12 \times 3 = 36$
2) $(7 \times 6) + (8 \times 6) = 15 \times 6 = 90$
3) $(2 \times 7) + (5 \times 7) = 7 \times 7 = 49$
4) $(9 \times 4) + (7 \times 4) = 16 \times 4 = 64$
5) $(10 \times 5) - (3 \times 5) = 7 \times 5 = 35$
6) $(8 \times 9) - (6 \times 9) = 2 \times 9 = 18$
7) $(8 \times 4) + (12 \times 4) + (6 \times 4) = 26 \times 4 = 104$
8) $(7 \times 7) + (5 \times 7) + (3 \times 7) = 15 \times 7 = 105$
9) $(9 \times 3) + (5 \times 3) + (11 \times 3) = 25 \times 3 = 75$
10) $(6 \times 6) + (8 \times 6) - (7 \times 6) = 7 \times 6 = 42$
11) $(7 \times 5) + (5 \times 5) - (3 \times 5) = 9 \times 5 = 45$
12) $(9 \times 4) - (3 \times 4) + (2 \times 4) = 8 \times 4 = 32$
13) $(2 \times 8) + (9 \times 8) + (3 \times 8) + (6 \times 8) = 20 \times 8 = 160$
14) $(2 \times 7) + (7 \times 7) + (4 \times 7) + (8 \times 7) = 21 \times 7 = 147$
15) $(9 \times 3) + (4 \times 3) + (8 \times 3) + (11 \times 3) = 32 \times 3 = 96$
16) $(6 \times 12) - (2 \times 12) + (4 \times 12) + (1 \times 12) = 9 \times 12 = 108$
17) $(6 \times 9) + (2 \times 9) - (3 \times 9) - (4 \times 9) = 1 \times 9 = 9$
18) $(11 \times 4) + (3 \times 4) - (7 \times 4) + (4 \times 4) = 11 \times 4 = 44$

Exercise 2

1) True   (2)   True
3) False; 7×7 (4)   True
5) True   (6)   False; 7×6
7) False; 6×8 (8)   True