CLASSWORK: Expressions and equations

1. **Simplify:**

   a) 1 cm + 3 cm + 5 cm =

   b) $3x + x + 9x - 12x =$

   c) $3x + 6x - 5x + 7 =$

   d) $3 + 4x + 2y - 4x =$

2. Solve the following equations:

a. $86 + x = 123$ b. $128 - m = 54$ c. $z - 35 = 43$

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$d.\ 3x = 27$ e. $40 \div x = 8$ f. $z \div 6 = 42$

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3. **Write an expression for the following problems:**

    a. 3 packages of cookies cost *a* dollars. How many dollars do 5 of the same packages cost?

    b. 5 bottles of juice cost *b* dollars. How many bottles can one buy with *c* dollars?

4. A 3-digit number **A2B** is divisible by 3 and by 5. Find the number.

5. **Is the number 12345 divisible by 3? by 9? by 5? by 10?**

6. Without calculating the sum, can you tell if $222 + 222222$ is divisible by 2? 3? 5? 10?

7. **Simplify expression, so that there is 0 (zero) on the right (move everything to the left)**

    a. $2x + a - 7 = x - a + 1$ b. $3y - b + 4 = b - y - 1$