

Collecting like terms

You can only collect terms whose letters are the same.

Step 1: Write out the question.

$$2a + 3b + 9a + b + 3c$$

Step 2: Circle all the terms with the same letters (like terms). Make sure you also capture the plus or minus on the left.

$$(2a) + 3b + (9a) + b + 3c$$

Step 3: Now put a rectangle around the next group of like terms.

$$(2a) + \boxed{3b} + (9a) + \boxed{b} + 3c$$

Step 4: If there are any more groups of like terms then put a triangle around them.

$$(2a) + \boxed{3b} + (9a) + \boxed{b} + \triangle 3c$$

Step 5: Now just add up how many of each group you have got. This is your answer!

$$(2a) + \boxed{3b} + (9a) + \boxed{b} + \triangle 3c$$

11a + 4b + 3c

Questions

Collect the like terms in these expressions:

1. $a + a$

2. $a + 2a$

3. $a + 3a + b$

4. $2a + b + 3b$

5. $a + b + 2b + 3a$

6. $a + 2b + 3c + 3a + 3b$

7. $3x + 7y + 2x + 9y$

8. $8A + 9A + 10B + 5A$

9. $13d + 2f + f + f + 2d$

10. $x + y + x + y + 2x + 2z$

11. $25x + 2y - 19x - y$

12. $A + 15B - A + 5B$

13. $3x + 45z - 4x + 13y$

14. $d - 2d + 3e + d$

15. $2f - 3f + 9g + 2f - 2f + f$

16. $-12x - 15y - 16x + 16y$

17. $34x + 13xy + 12y$

18. $99x - 12xy + x - 12xy^2$

19. $2(x + 3y) - 2x$

20. $3x(2 + x) - x^2$