Simplify Algebraic Expressions

Make an expression shorter by combining like terms.

Name _____ **Date** _____

Tonight's spark

The music room needs 4 microphones and 3 stands. The gym needs 2 microphones and 5 stands. The hall needs 6 microphones and 1 stand. How many of each in all?

Guess first: do the rooms need more microphones or more stands?

x-terms	Plain numbers
6x	4
2x	7
8x	11

add

Our class model: adding like items

Try it

Work it out on paper. Write one answer on each line.

1 **Which two terms are like terms?**

A. 4x and 9 **B.** 4x and 9x **C.** 4x and 9y **D.** x and y

My answer _____

2 **Simplify 5a + 2a.**

A. 10a **B.** 7 **C.** 7a

My answer _____

3 **What is the coefficient of m in 6m + 4?**

A. 6 **B.** 4 **C.** m **D.** 10

My answer _____

4 **Simplify 3x + 4 + 2x + 1.**

A. 10x **B.** 5x + 4 **C.** 5x + 5

My answer _____

5 **Simplify 9y – 4y + 3.**

A. 13y + 3 **B.** 8y **C.** 5y – 3 **D.** 5y + 3

My answer _____

6 **A cart has 3 apples (a) and 4 pears (p). Then 5 more apples and 2 more pears are added. Which expression shows the whole cart?**

A. 14ap **B.** 8a + 6p **C.** 8a + 6

My answer _____

Talk about it

Does a microphone count the same thing as a stand?

Home mission

Use spoons for microphones and forks for stands. Make piles of 4 spoons and 3 forks, 2 and 5, and 6 and 1. How many spoons and forks in all?

If we get stuck, ask

- Which terms have the same variable and exponent? Only those can be combined.
- When we combine, we add the numbers in front and keep the letter the same.
- Does this number have a letter? If not, it stays on its own.

Do it on a screen

Scan or type the link. Same lesson, with hints.

eduwonderlab.com/lessons/6-15/homework.html

How did it feel? (optional)

Tricky Getting there Got it