

ALGEBRA: Addition of Algebraic Expressions (Sample Problems & Solutions) - Part 002

1. Find the sum of the following:

$(0.6y^2 + 1.2y - 0.3)$, $(8.1y^2 - 7.2y + 0.4)$, and $(-1.1y^2 - 0.7y + 1.0)$.

Solution:

Add up all the five algebraic expressions as follows,

$$(0.6y^2 + 1.2y - 0.3) + (8.1y^2 - 7.2y + 0.4) + (-1.1y^2 - 0.7y + 1.0)$$

Remove all parenthesis for simplifying the expressions as follows,

$$0.6y^2 + 1.2y - 0.3 + 8.1y^2 - 7.2y + 0.4 - 1.1y^2 - 0.7y + 1.0$$

Now, indicate all expressions with y^2 and add them as follows,

$$0.6y^2 + 1.2y - 0.3 + 8.1y^2 - 7.2y + 0.4 - 1.1y^2 - 0.7y + 1.0$$

$$7.6y^2 + 1.2y - 0.3 - 7.2y + 0.4 - 0.7y + 1.0$$

Then, for the expression with y ,

$$7.6y^2 + 1.2y - 0.3 - 7.2y + 0.4 - 0.7y + 1.0$$

$$7.6y^2 - 6.7y - 0.3 + 0.4 + 1.0$$

Lastly, for the last term,

$$7.6y^2 - 6.7y - 0.3 + 0.4 + 1.0$$

$$7.6y^2 - 6.7y + 1.1$$