Grade 9 Mathematics Worksheet

Expressions

Questions:

1. $(2x + 3y)^2 = ...$

   A) $4x^2 + 9y^2$
   B) $25x^2 y^2$
   C) $2x^2 + 6xy + 3y^2$
   D) $4x^2 + 12xy + 9y^2$

Solution

1. $(2x + 3y)^2 = (2x)^2 + 2(2x)(3y) + (3y)^2 = 4x^2 + 8xy + 9y^2$ which is option (D).

Avoid teaching this using the FOIL and writing it as (a+b)(a+b) and then FOILING. This question could be more challenging by using rational coefficients. The preferred method here will be the squaring of the binomial.