

Exercise 34

In the following exercises, evaluate the following expressions.

When $x = 3$, $y = 2$

$$6x^2 + 3xy - 9y^2$$

Solution

When $x = 3$, $y = 2$

$$\begin{aligned}6x^2 + 3xy - 9y^2 &= 6(3)^2 + 3(3)(2) - 9(2)^2 \\&= 6(9) + 3(6) - 9(4) \\&= 54 + 18 - 36 \\&= 72 - 36 \\&= 36.\end{aligned}$$