Exercise 29

In the following exercises, simplify each expression.

$$8 + 2[7 - 2(5 - 3)] - 3^{2}$$

Solution

Remember the order of operations: parentheses, exponents, multiplication, division, addition, subtraction.

$$8 + 2[7 - 2(5 - 3)] - 3^{2} = 8 + 2[7 - 2(2)] - 3^{2}$$
$$= 8 + 2[7 - 4] - 3^{2}$$
$$= 8 + 2[3] - 3^{2}$$
$$= 8 + 2[3] - 9$$
$$= 8 + 6 - 9$$
$$= 14 - 9$$
$$= 5$$