

Grade 9 Mathematics Worksheet

Equations

Questions:

What is the value of x in the equation $(2q^{-3})(6q^x) = 12q^{15}$?

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Solution

$$(2q^{-3})(6q^x) = 12q^{15}$$

$$\therefore 12q^{x-3} = 12q^{15}$$

$$\therefore x - 3 = 15$$

$$\therefore x = 18.$$

This equation contains two variables, but the one being solved is in the power.