perform operation on the right side of the equation $-5x(2x-3)+5x^2-3$
Find type of expression on the right side
right side has the form of the multiplication of the polynomial by monomial
$$a(bx+c)+fx^2+gx+h$$

multiply the polynomial $2x-3$ by monomial $-5x$

the result of multiplication is polynomial **$-10x^2+15x$**

insert the result of multiplication into equation

$-5x(2x-3)+5x^2-3=-10x^2+15x+5x^2-3$

simplify the result of multiplication by combining like terms **$-10x^2+15x+5x^2-3$**

find and combine like terms in polynomial $-10x^2+15x+5x^2-3$
-3

The result of performing all operations on the right side of equation is the polynomial
$-5x^2+15x-3$
Insert this result into equation
$-9x^2-4x+20=-5x^2+15x-3$