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Dice Substitution

level **3**

Roll two 6-faced dice.

Work out the value of the expression with your number.

This is your score.

As a pair

The largest score wins the game and starts the next game.

If you are working alone

Explore the difference between the larger and smaller scores for each expression.

Use dice with a different numbers of faces and continue the investigation.

Game 1					
	First Dice, x	Value of expression	Second Dice, x	Value of expression	Difference between values
$x(x+2)(x+3)$					
$x(3x-1)(2x+1)$					
$x^2(2x-1)$					
$(x-7)(x-8)$					
$(x^2-1)(x+1)$					
$(3x-7)(5x-8)$					
$(4x-3)(x-5)$					
$x(x-7)(x-8)$					

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Game 2					
	First Dice, x	Value of expression	Second Dice, x	Value of expression	Difference between values
$x(x+2)(x+3)$					
$x(3x-1)(2x+1)$					
$x^2(2x-1)$					
$(x-7)(x-8)$					
$(x^2-1)(x+1)$					
$(3x-7)(5x-8)$					
$(4x-3)(x-5)$					
$x(x-7)(x-8)$					

Game 3					
	First Dice, x	Value of expression	Second Dice, x	Value of expression	Difference between values
$x(x+2)(x+3)$					
$x(3x-1)(2x+1)$					
$x^2(2x-1)$					
$(x-7)(x-8)$					
$(x^2-1)(x+1)$					
$(3x-7)(5x-8)$					
$(4x-3)(x-5)$					
$x(x-7)(x-8)$					

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