

Factorise a quadratic (difference of two squares)

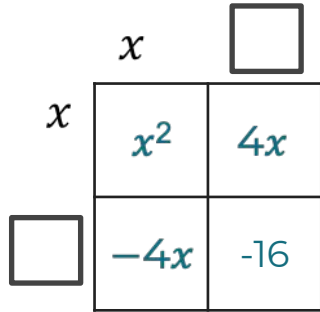
Maths

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Factorise a quadratic (difference of two squares)

1. Fill in the blanks.



$$x^2 - 16 = (x + \text{input})(x - \text{input})$$

2. Factorise each expression

a) $x^2 - 4$

d) $x^2 - 100$

b) $x^2 - 9$

e) $x^2 - 400$

c) $x^2 - 1$

f) $25 - x^2$

3. Which expressions are equivalent?

$$(x - 6)(x + 6)$$

$$(x - 6)(x - 6)$$

$$x^2 - 6$$

$$x^2 - 36$$

$$x^2 + 6$$

$$36 - x^2$$

$$(x + 6)(x - 6)$$

$$x^2 + 36$$



Answers



Factorise a quadratic (difference of two squares)

1. Fill in the blanks.

	x	<input type="text" value="4"/>
x	x^2	$4x$
<input type="text" value="-4"/>	$-4x$	-16

$$x^2 - 16 = (x + \input{type="text"}{4})(x - \input{type="text"}{4})$$



Factorise a quadratic (difference of two squares)

2. Factorise each expression

a) $x^2 - 4$ $(x + 2)(x - 2)$

b) $x^2 - 9$ $(x + 3)(x - 3)$

c) $x^2 - 1$ $(x + 1)(x - 1)$

d) $x^2 - 100$ $(x + 10)(x - 10)$

e) $x^2 - 400$ $(x + 20)(x - 20)$

f) $25 - x^2$ $(5 + x)(5 - x)$

3. Which expressions are equivalent?

$(x - 6)(x + 6)$	$(x - 6)(x - 6)$
$x^2 - 6$	$x^2 - 36$
$x^2 + 6$	$36 - x^2$
$(x + 6)(x - 6)$	$x^2 + 36$

