

Mathematics

Difference of Two Squares

Mrs Buckmire



Try this

Expand and simplify

$$(x + 2)(x - 2) \quad (x - 5)(x + 5) \quad (x + 2.5)(x - 2.5)$$

What do you notice?



Independent task

Binh has completed some questions. Correct and explain her mistakes.

She has expanded and simplified the following expressions:

$$(x + 5)(x + 4)$$

$$= x^2 + 5x + 4x + 20 = 30x^2$$

$$(x - 5)(x + 4)$$

$$= x^2 + 4x - 5x + 20 = x^2 - x + 20$$

$$(x + 5)(x - 4)$$

$$= x^2 - 4x + 5x - 20 = x^2 - x - 20$$

$$(x + 4)^2$$

$$= x^2 + 16$$

$$(x + 4)(x - 4)$$

$$= x^2 - 16x - 16$$



Explore

Xavier says....

Is he correct?

How could you calculate

$$35^2 - 15^2 ?$$

$$19^2 - 9^2 ?$$

$$38^2 - 12^2 ?$$

Explain why this works.

Generate your own calculations that can be found using a similar 'trick'.

I can work out $45^2 - 15^2$
by calculating 60×30

