

Factoring trinomials

Q1: Factor the Following trinomial

$$\mathbf{x^2 + 6x + 8}$$

Now let's factor the trinomial:

Step 1: Identify the values for b and c.

In this example, $b =$ and $c =$

Step 2: Find two numbers that ADD to b and MULTIPLY to c.

This step can take a little bit of trial-and-error.

For instance, you could pick 5 and 1 because $5 + 1 = 6$. But 5×1 does not equal 8, so these numbers would not work.

However, if you chose and , you can easily confirm that:

$$+ = 6 \text{ (the value of } b\text{); and}$$

$$\times = 8 \text{ (the value of } c\text{)}$$

Step 3: Use the numbers you picked to write out the factors and check

For this Question , the factors would be and