

A multiplication problem 341×6 where the digits are colorful: 3 is pink, 4 is yellow, 1 is green, x is blue, and 6 is purple. There is a faint shadow of the numbers below.

Breaking Apart a Factor

A multiplication problem 239×3 where the digits are colorful: 2 is pink, 3 is yellow, 9 is green, x is blue, and 3 is purple. There is a faint shadow of the numbers below.

1. How could you break apart 242 to make 242×6 a simpler problem?

Example: To solve 232×4

I know $200 \times 4 = 800$

I know $30 \times 4 = 120$

I know $2 \times 4 = 8$

So, $232 \times 4 = 800 + 120 + 8 = 928$

2. Would this work for any number? Explain and support your reasoning with other examples.