**Substitution Principle: Part I**

In math, a variable is a letter or symbol used to represent a number. Use the values given for the variables a, b, c and d in each set to evaluate each expression.

### 1. If... \( a = 1 \quad b = 2 \quad c = 0 \quad d = 100 \)

...then evaluate the expression... | ...by substituting the given numbers... | ...to find the sum.
--- | --- | ---
3ab + 3ac | \((3 \times 1 \times 2) + (3 \times 1 \times 0)\) | 6
3ab + 4ac | \((3 \times \_ \times \_) + (3 \times \_ \times \_)\) | ___
3abc + 4bcd | \((3 \times \_ \times \_ \times \_) + (3 \times \_ \times \_ \times \_)\) | ___
6abc + 8bcd | ___ | ___
30 abc + 40 bcd | ___ | ___

### 2. If... \( a = 2 \quad b = 4 \quad c = 0 \quad d = 200 \)

...then evaluate the expression... | ...by substituting the given numbers... | ...to find the sum.
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3ab + 3ac | \((3 \times 2 \times 4) + (3 \times 2 \times 0)\) | 24
3ab + 4ac | \((3 \times \_ \times \_) + (3 \times \_ \times \_)\) | ___
3abc + 4bcd | \((3 \times \_ \times \_ \times \_) + (3 \times \_ \times \_ \times \_)\) | ___
6abc + 8bcd | ___ | ___
30 abc + 40 bcd | ___ | ___

### 3. If... \( a = 2 \quad b = 3 \quad c = 5 \quad d = 200 \)

...then evaluate the expression... | ...by substituting the given numbers... | ...to find the sum.
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3ab + 3ac | \((3 \times 2 \times 3) + (3 \times 2 \times 5)\) | 48
3ab + 4ac | \((3 \times \_ \times \_) + (3 \times \_ \times \_)\) | ___
3abc + 4bcd | \((3 \times \_ \times \_ \times \_) + (3 \times \_ \times \_ \times \_)\) | ___
6abc + 8bcd | ___ | ___
30 abc + 40 bcd | ___ | ___