Calculus II

Integral of rational function with cubic denominator, part 1

Todor Milev

2019

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$$- \frac{1}{10} \ln|x + 2| + K$$$$

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Q(x) has distinct linear factors

• Suppose Q(x) is a product of distinct linear factors:

$$Q(x) = (a_1x + b_1)(a_2x + b_2) \cdots (a_kx + b_k)$$

where no factor is repeated and no factor is a constant multiple of another.

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• We show how to find A_1, A_2, \dots, A_k on examples.