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Introduction to COMP26120: Video 4
An Example Problem

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A Problem

You work for an advertising company selling banners. Banners require a frame with four side panels, which come in pairs of the same length. Your supplier has provided a list of the lengths of side panels it provides. When a client requests a banner of a particular area you must check whether you can make a banner of that area. Your job is to write an algorithm for this task. You can assume that any dimension of banner is suitable as long as it is the correct area.

Framing as a Computational Problem

Consider a list of positive integers. We are given a positive integer, *k*, and wish to find two (not necessarily distinct) numbers, *m* and *n*, in the list whose product is *k*, i.e., $m \times n = k$.

For example consider k = 72 and the list

[5, 24, 9, 5, 30, 6, 3, 12, 2, 10]