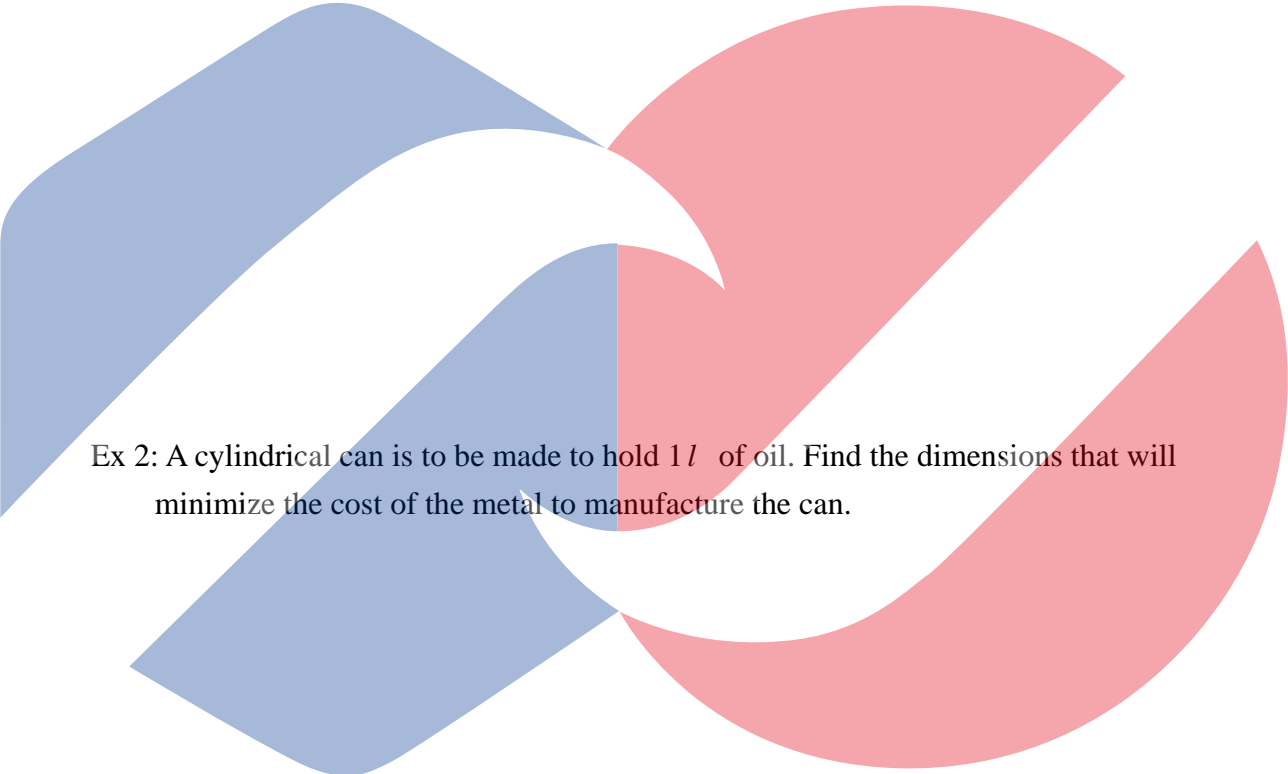


4.6 Optimization problems

Ex 1: By cutting away identical squares from each corner of a rectangular piece of cardboard and folding up the resulting flaps, the cardboard may be turned into an open box. If the cardboard is 16 inches long and 10 inches wide, find the dimensions of the box that will yield the maximum volume.



Ex 2: A cylindrical can is to be made to hold 1 l of oil. Find the dimensions that will minimize the cost of the metal to manufacture the can.

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