## Josh's shells and pebbles

Josh has a box with dimensions $40 \mathrm{~cm} \times 30 \mathrm{~cm} \times 30 \mathrm{~cm}$ full of shells and pebbles he has collected.

He wants to put them in the back of a cupboard where there is a space with a base area of $25 \mathrm{~cm} \times 35 \mathrm{~cm}$.

If he is to make a new box to fit all the shells and pebbles in, to fit in this space, what is the minimum height this box should be?


