m and n are positive integers s.t.

$$75m = n^3$$

What is a minimum possible value of $m+n$?

We have $n^3 = 3 \times 25 \times m$

$$= 3 \times 5^2 \times m$$

So m must be a multiple of

$$3^2 \times 5 = 45$$

To minimise $m+n$, we minimise m so set $m = 45$, therefore

$$n^3 = 3^3 \times 5^3$$

$$\Rightarrow n = 3 \times 5 = 15$$

So $m+n = 45 + 15 =$ **60**