

Suppose it costs \$1 to produce a Big Red Pill, that ten people are willing to pay \$20 each for the pill, and another ten people are willing to pay \$5 each.

A monopoly producer—a producer with a patent—prices the pill at \$20, sells ten pills, and earns a profit of \$19 a pill, or \$190 (minus R&D costs).

Now suppose we buy the patent for \$190, put it in the public domain, and watch competitors bid the price down to \$1. Now all twenty people buy the pills.

In the first case, we collectively fork over \$200 for ten pills. In the second case, we collectively fork over \$190 up front, plus \$1 per pill, for a total of \$210 — for twenty pills. We pay slightly more for a lot more pills and get a lot more social value from the invention.

Exercise: Compute the exact increase in social value.

(Note: Type corrected in response to comment from Tomm.)