



Problem of the Week

Problem E

Powerful Factors

The product of the integers 1 to 64 can be written in an abbreviated form as $64!$ and we say 64 *factorial*. So $64! = 64 \times 63 \times 62 \times \cdots \times 3 \times 2 \times 1$.

In general, the product of the positive integers 1 to m is

$$m! = m \times (m - 1) \times (m - 2) \times \cdots \times 3 \times 2 \times 1.$$

Determine the largest positive integer value of n so that $64!$ is divisible by 2016^n .



We need more powers

