

You must completely simplify the numerator before dividing.

$$\frac{(2 + 2^3)^2}{5} = \frac{(2 + 8)^2}{5} = \frac{(10)^2}{5}$$

At this point, you may have divided 10 by 5 before computing the exponent. Here is the correct computation:

$$\frac{(10)^2}{5} = \frac{100}{5} = 20$$

The correct answer is 20.