

For the following questions, please **show work** as to how you came up with your answers.

Simplify.

1. $\frac{5^6}{5^2}$

2. $\frac{y^{25}}{y^{12}}$

3. $\frac{3^{17}}{3^{19}}$

4. $\frac{h^7}{h^{15}}$

5. 7^0

6. 0^0

7. $\frac{4^5 \cdot 4^8}{4^2 \cdot 4 \cdot 4^4}$

8. $\frac{2^{-6} \cdot 2 \cdot 2^4}{2^0 \cdot 2^7 \cdot 2^{-10}}$