

## Alg 1 Practice Quiz 8.3, 8.4

Simplify the expression.

①  $\left(\frac{2}{x}\right)^5$

②  $\left(\frac{6^{10}}{6^3}\right)^{-2}$

③  $\frac{10^{-6}}{10^{-10}}$

④  $\frac{5^{13}}{5^{16}}$

⑤  $\frac{(2a^2b)^3}{(2ab^3)^2}$

⑥  $\frac{2^3}{2^{-4}}$

Rewrite in decimal form.

⑦  $9.99 \times 10^6$

⑧  $1.356 \times 10^{-3}$

⑨  $8.623514 \times 10^{13}$

Rewrite in scientific notation

⑩ 0.032

⑪ 0.00099578

⑫ 33,254.236

Evaluate the expression without a calculator

⑬  $(4 \times 10^7) \cdot (1.2 \times 10^{-2})$

⑭  $(3.1 \times 10^6) \cdot (4 \times 10^3)$