Check Your Understanding Expressions: Exponents

Answer these problems, then check your answers using the key on the next page.

#1) Simplify without using a calculator. If answers contain exponents, make sure they are positive.

$$\left(\frac{-9x^{-5}y^{-3}z^2}{3x^2y^{-5}z^0}\right)^{-3}$$

#2) Simplify without using a calculator. If answers contain exponents, make sure they are positive. $2^5 \cdot 4^{-3}$

Answers:

$$#1) -\frac{x^{21}}{27y^6z^6}$$

#2)
$$\frac{1}{2}$$