

# Homework

Pg. 464 #1 - 5, 23 - 28

Simplify:

1.  $2^2 \cdot 2^3$       2.  $5^3 \cdot 5^3$       3.  $n^6 \cdot n^2$       4.  $x^2 \cdot x^{-3} \cdot x^4$

5. Science If you traveled in space at a speed of 1000 miles per hour, how far would you travel in  $7.5 \times 10^5$  hours? Write your answer in scientific notation.

Simplify:

23.  $(2^3)^3$       24.  $(3^6)^0$       25.  $(x^2)^{-1}$   
26.  $(b^4)^6 \cdot b$       27.  $b \cdot (a^3)^4 \cdot (b^{-2})^3$       28.  $(x^4)^2 \cdot (x^{-1})^{-4}$