

Name: \_\_\_\_\_

Evaluate each quotient. Express the results in both scientific notation and standard form.

**1.** 
$$\frac{8 \times 10^3}{2 \times 10^9}$$
 **2.**  $\frac{4.9 \times 10^{-3}}{2.5 \times 10^{-4}}$ 

**3.** 
$$\frac{5.8 \times 10^4}{5 \times 10^{-2}}$$
 **4.**  $\frac{1.6 \times 10^5}{4 \times 10^{-4}}$ 

**5.** 
$$\frac{8.6 \times 10^6}{1.6 \times 10^{-4}}$$
 **6.**  $\frac{4.2 \times 10^{-2}}{6 \times 10^{-7}}$ 

$-9x10^{6}$	$2.76 \times 10^7$
$\frac{1}{3 \times 10^2}$	8. $6.9 \times 10^5$

$8 x 10^5$	9.2 $x$ 10 <sup>-8</sup>
<b>9.</b> $\frac{1.6 \times 10^2}{1.6 \times 10^2}$	<b>10.</b> $\frac{1}{2 \times 10^{-6}}$

<b>11.</b> $\frac{4.8 \times 10^4}{2 \times 10^{-5}}$	<b>12.</b> $\frac{1.161 \times 10^{-9}}{4.2 \times 10^{-6}}$
$3 \times 10^{-5}$	$4.3 \times 10^{-6}$

\_Per. \_\_\_\_

 $13. \ \frac{4.625 \, x \, 10^{10}}{1.25 \, x \, 10^4}$ 

 $14. \frac{2.376 \, x \, 10^{-4}}{7.2 \, x \, 10^{-8}}$ 

**15.**  $\frac{8.74 \times 10^{-3}}{1.9 \times 10^5}$  **16.**  $\frac{3.5 \times 10}{7 \times 10^{-9}}$ 

**17.** Jupiter, the largest planet in our solar system, is 7.8 x  $10^8$  kilometers from the sun. The speed of light is 3 x  $10^5$  kilometers per second. How many seconds does it take sunlight to reach Jupiter?

**18.** The total length of all drawers in a library card catalog is  $5 \times 10^3$  centimeters. If each card has a thickness of 2.5 x  $10^{-2}$  centimeters, how many cards will fit in the card catalog?

## **Mixed Review**

**1.** A company is making blocks. Each block is a cube and has a volume of  $\frac{64}{343}$  ft<sup>3</sup>. How long is each side of the building block?

- **2.**  $k^{0}(k^{4})(k^{-6})$
- **3.**  $\frac{h^3}{h^{-6}}$

 $4 \cdot \frac{2}{3}v - 6 = 6 - \frac{2}{3}v$ 

5. Two thirds of a number reduced by 11 is equal to 4 more than the number. Find the number.