

Name _____ Block _____

Ch 8 Review

Write in scientific notation.

1) 0.0000023

2) 470,000,000

3) 137,400,000,000,000,000

4) 0.00000000000000556

Multiply.

5) $(8 \times 10^{-13})(5 \times 10^4)$

6) $(7.6 \times 10^{-4})(6 \times 10^{-4})$

7) $(8 \times 10^{-5})(8 \times 10^{-3})$

8) $(3.5 \times 10^5)(2.5 \times 10^7)$

Divide.

9) $\frac{5 \times 10^{-2}}{8 \times 10^{-6}}$

10) $\frac{12.6 \times 10^3}{3 \times 10^{-2}}$

11) $\frac{7.7 \times 10^{-4}}{1.1 \times 10^{-1}}$

12) $\frac{3 \times 10^5}{12 \times 10^{-2}}$

- 13) A savings account with \$1500 earns 5% interest per year.
Write the growth model for interest earned in 6 years.
- 14) A business had \$65,000 profits in 1995. The profits grew by 15% over the next 10 years. Write the growth model for the profits.
- 15) Computer sales have declined over the past 5 years from \$540,000,000 per year at a rate of 15% per year. Write the decay model for decline in sales.
- 16) A school had 1200 students in 2000, but has been declining at a rate of 3% per year. Write the model for the number of students during the next 8 years.

State whether the model is a growth or decay. What is the per cent of change?

17) $y = 200(1.12)^6$

18) $y = 1500(0.94)^t$

19) $y = 64(0.8)^t$

20) $y = 45,000(1.3)^{12}$