T3-16 Review for Test

Name_____ Number _____ Period_____

Using properties of exponents, simplify each expression

1) $\left(\dfrac{a^6}{a^2b^5}\right)^3$
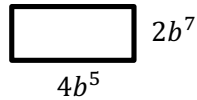
2) $(-3k^4)^2$

3) $\dfrac{n^{-5}m^3}{n^2m^{-2}}$

4) $r^6 \cdot r^{-10}$

5) $(a^4bc)^0$

6) $(3a^2b^3c^0)^3$

7) What is the area of the rectangle?

 $2b^7$

$4b^5$

Perform each operation

8) $(8.3\times10^{-6}) - (7.4\times10^{-7})$

9) $(2\times10^{-3}) + (3.2\times10^{-1})$

10) $\dfrac{9.6 \times 10^{-3}}{1.2 \times 10^5}$

11) $(3.6\times10^8)(2.1\times10^{-4})$

12) $(9.67 \times 10^6) + (3.45 \times 10^5)$

13) $(4.5 \times 10^3)(1.6 \times 10^5)$

14) $\dfrac{4.62 \times 10^7}{1.2 \times 10^4}$

15) $(3.64 \times 10^6) - (2.18 \times 10^4)$

Convert to Scientific Notation:

16) 703,000,000,000

17) 0.00000000058

18) 69,900,000

19) 575,000,000

Convert to Standard Notation

20) 6.27×10^{-6}

21) 2.09×10^{-9}

22) 9.03×10^2

23) 3.85×10^{-4}