Review of Exponent Rules & Their Use in Operations
(Simplify or perform the indicated operation.)

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1) $(5a^7b^4)(-3a^2b^{10})$

2) $(5a^{-7}b^4)(-3a^{-2}b^{10})$

3) $(9m^0n^7)^{-2}$

7) $\left(\dfrac{2x^7y}{5z^4}\right)^{-3}$

4) $\dfrac{(t^6u^4)^2}{t\,u^{13}}$

8) $\left(\dfrac{10\,x^6\,y^3\,z}{24\,x\,\,y^8}\right)^2$

5) $(7km)^2$

9) $(7k-m)^2$

6) $(7k-5)^2$

10) $\dfrac{15n^9+10n^7-5n^2}{5n^2}$

11)
$$(7y + 10) - (3y - 4)$$

12)
$$(8x^6 - 9x^5 + 17) - (3x^6 + 5x^5 - 6)$$

13) Write the number in scientific notation:

$$0.0005207$$

14) Write the number in standard form:

$$9.013 \times 10^5$$

15)
$$(7y + 10)(3y - 4)$$

16)
$$(2x - 5)(4x^2 + 6x - 7)$$

17) $-4^2 + (-9)^2$

18) $(-13)^0 - 5(7)^0$

19) $2r^{-3}$

20) $(2r)^{-3}$

21)

$$\left(\frac{x^4 y^0}{x^0 y^{-8}} \right)^{-2}$$

22)

$$\left(\frac{x^{-13} y^{-7}}{x^{-10} y^{-8}} \right)^{5}$$

23)

$$\left(\frac{m^4 n^2}{m^{14} n^{-8}} \right)^{0}$$