

Handout 1: Austin Powers

Or maybe it's just powers.

1. Simplify $(z^1 z^5)^4$.

2. Simplify $(t^2)^3(t^4)^5$.

3. Simplify $xyz^4xy^9z^0$.

4. Simplify $(xy)^5(x^9y^7)$.

5. Simplify $4x^4(y^2)^2(4x^2y^4)^2$.

6. Simplify $-8x\left(\frac{1}{2}\right)^3(2(x^4)^3)^2$.

7. Simplify $\frac{(t^3t^1)^5}{t^{10}}$.

8. Simplify $(10z^{-4})^2\left(-\frac{1}{5}z^6\right)$.

9. Simplify using positive exponents:
 $\left(\frac{32(x^2)^5}{4x^5x^2}\right)^2$.

10. Simplify $\left(\frac{(x^4x^2y)^0}{3^{-2}x^5y^{-2}}\right)^2$.