

Problem Set

1. Compute: $3^3 \times 3^2 \times 3^1 \times 3^0 \times 3^{-1} \times 3^{-2} =$
Compute: $5^2 \times 5^{10} \times 5^8 \times 5^0 \times 5^{-10} \times 5^{-8} =$
Compute for a nonzero number, a : $a^m \times a^n \times a^l \times a^{-n} \times a^{-m} \times a^{-l} \times a^0 =$
2. Without using (10), show directly that $(17.6^{-1})^8 = 17.6^{-8}$.
3. Without using (10), show (prove) that for any whole number n and any positive number y , $(y^{-1})^n = y^{-n}$.
4. Without using (13), show directly without using (13) that $\frac{2.8^{-5}}{2.8^7} = 2.8^{-12}$.