2.5   1) $\dfrac{5^3}{5^6} = 5^{3-6} = 5^{-3} = \dfrac{1}{5^3} = \dfrac{1}{125}$

2) $\dfrac{4^{-5}}{4^{-7}} = 4^{-5-(-7)} = 4^2 = 16$

3) $\dfrac{8^{-3}}{8^{-7}} = 8^{-3-(-7)} = 8^4 = 4096$

4) $\dfrac{7^5}{7^7} = 7^{5-7} = 7^{-2} = \dfrac{1}{7^2} = \dfrac{1}{49}$

5) $\dfrac{(-3)^3}{(-3)^2} = (-3)^{3-2} = (-3)^1 = -3$

6) $\dfrac{2^6}{2^2} = 2^{6-2} = 2^4 = 16$