Exponents

Simplify. Your answer should contain only positive exponents.

1) $\left(\dfrac{2 \cdot 2^3}{2}\right)^3$

2) $\left(\dfrac{\left(2^0 \cdot 2^2\right)^4}{2^2}\right)^2$

3) $\dfrac{\left(2^0\right)^2}{\left(2^3\right)^4 \cdot 2^2}$

4) $\dfrac{\left(3^3\right)^0 \cdot \left(3^3\right)^4}{\left(3^3\right)^2 \cdot 3^2}$

5) $\dfrac{2^4 \cdot 2^2}{\left(2^0\right)^3}$

6) $\dfrac{4^2}{\left(\left(4^2\right)^4 \cdot \left(4^3\right)^3\right)^2}$

7) $\dfrac{4^4}{4^2 \cdot 4^2}$

8) $\dfrac{4^4 \cdot 4^4}{\left(4^3\right)^4}$

9) $\left(\dfrac{4^2 \cdot 4^0}{4^0}\right)^3$

10) $\left(\dfrac{4 \cdot 4^3 \cdot 4^3}{4^4}\right)^2$

Answers to Exponents

1) 2^9

2) 2^{12}

3) $\dfrac{1}{2^{14}}$

4) 3^4

5) 2^6

6) $\dfrac{1}{4^{32}}$

7) 1

8) $\dfrac{1}{4^4}$

9) 4^6

10) 4^6