



Equations with exponents – including decimal and fractional bases

Grade 6 Exponents Worksheet

Solve the following expressions.

1) $\left(\frac{1}{8}\right)^2 \times 2^2$

7) $1^9 \div \left(\frac{1}{15}\right)^1$

2) $0.897^0 \times 0^{31}$

8) $\left(\frac{5}{4}\right)^3 \times \left(\frac{2}{5}\right)^3$

3) $\left(\frac{1}{2}\right)^3 - 0.5^1$

9) $\left(\frac{2}{3}\right)^2 + \left(\frac{4}{3}\right)^3$

4) $0.5^2 \times \left(\frac{3}{10}\right)^1$

10) $8^3 \times \left(\frac{1}{8}\right)^3$

5) $2^5 \div 0.5^1$

11) $\left(\frac{2}{5}\right)^2 - \left(\frac{1}{5}\right)^2$

6) $7^2 + 0.9^2$

12) $0.7^0 - 5^2$



Answers

1) $\frac{1}{16}$

2) 0

3) -0.375

4) 0.075

5) 64

6) 49.81

7) 15

8) $\frac{1}{8}$

9) $\frac{76}{27}$

10) 1

11) $\frac{3}{25}$

12) -24
