

Equations with exponents – including decimal and fractional bases

Grade 6 Exponents Worksheet

Solve the following expressions.

1) $(0.4)^2 \times 10^2$

7) $\left(\frac{1}{5}\right)^1 \times 5^0$

2) $9^2 + 0^{211}$

8) $4^3 \div \left(\frac{3}{4}\right)^3$

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

9) $(1.4)^2 - \left(\frac{1}{3}\right)^2$

4) $0.6^2 \div \left(\frac{1}{10}\right)^2$

10) $6^2 \times \left(\frac{1}{2}\right)^2$

5) $8^2 - 0.3^3$

11) $\left(\frac{7}{11}\right)^2 + \left(\frac{2}{11}\right)^2$

6) $5^2 \times \left(\frac{1}{25}\right)^2$

12) $5^{12} \div 5^{11}$

Answers

1) 16

2) 81

3) 1

4) 36

5) 63.973

6) $\frac{1}{25}$

7) $\frac{1}{5}$

8) $\frac{4096}{27}$

9) 1.84888889

10) 9

11) $\frac{53}{121}$

12) 5