



# Equations with exponents – including decimal and fractional bases

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## Grade 6 Exponents Worksheet

Solve the following expressions.

1)  $\left(\frac{1}{2}\right)^5 \times 4^2$

7)  $0^3 \div \left(\frac{1}{12}\right)^6$

2)  $0.1^2 \times 10^3$

8)  $\left(\frac{9}{7}\right)^2 + \left(\frac{2}{7}\right)^3$

3)  $\left(\frac{2}{5}\right)^3 \div 0.5^2$

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

4)  $3^3 \times \left(\frac{2}{13}\right)^0$

10)  $5^3 \times 0.5^3$

5)  $9^2 + 1.2^1$

11)  $\left(\frac{1}{4}\right)^2 - \left(\frac{1}{8}\right)^2$

6)  $2.1^2 - 3^2$

12)  $0.5^1 + 0.8^2$

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## Answers

1)  $\frac{1}{2}$

7) 0

2) 10

8)  $\frac{575}{343}$

3) 0.256

9)  $\frac{125}{12}$

4) 27

10) 15.625

5) 82.2

11)  $\frac{3}{64}$

6) -4.59

12) 1.14

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