

# Equations with exponents – including decimal and fractional bases

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## 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)  $-24$