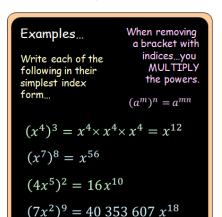
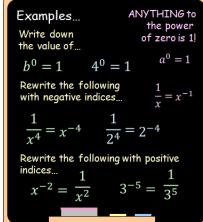
Outcome 2 - More Laws of Indices

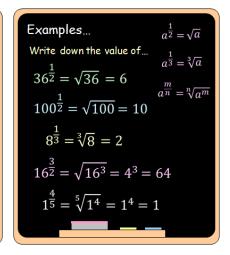
Bronze examples...



Silver examples



Gold examples



Bronze Questions

Write each of the following in their simplest index form...





 $(q^7)^{11}$



 $(6e^4)^2$

 $(2g^8)^3$

 $(2y^7)^5$

 $(4w^{10})^3$

 $(4h^4)^4$

 $(5b^5)^8$

Silver Questions



Write down the value of...





 9^0

Rewrite the following with negative indices...

3



 $\frac{1}{8^2}$

Rewrite the following with positive indices...

 t^{-8}

<u>4−2</u>

Gold Questions

Write down the value of ...



 $\stackrel{2}{4}$ 144 $^{\frac{1}{2}}$

 $\frac{1}{3}$ 1 $\frac{1}{3}$

 $4 1000^{\frac{1}{3}}$

 $\frac{3}{4}$ 81 $\frac{3}{4}$

\$

 $125^{\frac{2}{3}}$

Bronze Answers

- 1. x^{30}
- q⁷⁷
- u³⁶
 k³⁰
- 5. 36e⁸
- 6. $8g^{24}$
- 7. 32*y*³⁵ 8. 64*w*³⁰
- 9. $256h^{16}$ 10. $390625b^{40}$

Silver Answers

- 1. 1 2. 1 3. g^{-6} 4. 8^{-2}
- 5. $\frac{1}{t^8}$ 6. $\frac{1}{4^2}$

Gold Answers

- 1. 5 2. 12
- **3**. 1 **4**. 10
- **5**. 27 **6**. 25