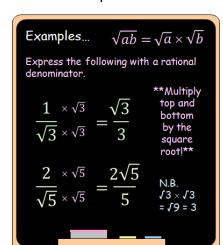
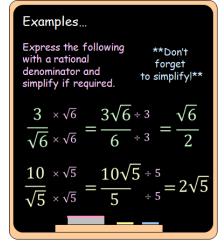
Outcome 2 - Rationalising the Denominator

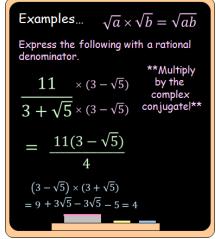
Bronze examples...



Silver examples



Gold example



Bronze Questions

Express each of the following with rational denominators...



 $\frac{1}{\sqrt{7}}$

 $\frac{1}{\sqrt{13}}$

 $\frac{1}{\sqrt{6}}$

 $\frac{2}{\sqrt{3}}$

 $\frac{5}{\sqrt{11}}$

 $\frac{3}{\sqrt{10}}$

 $\frac{4}{\sqrt{15}}$

Silver Questions

Express each of the following with rational denominators and simplify if required...



 $\frac{8}{\sqrt{6}}$

 $\frac{3}{\sqrt{1!}}$

 $4 \frac{44}{\sqrt{11}}$

 $\frac{10}{\sqrt{5}}$

<u>26</u>

 $\frac{2}{\sqrt{3}}$

 $\frac{20}{\sqrt{11}}$

Gold Questions

Express each of the following with rational denominators...



 $\frac{2}{5+\sqrt{2}}$

 $\frac{4}{4+\sqrt{5}}$

 $\frac{4}{3-\sqrt{3}}$

 $\frac{13}{5 - \sqrt{11}}$

 $\frac{1}{6+\sqrt{3}}$

 $\frac{2}{6-\sqrt{2}}$

 $\frac{8}{10+\sqrt{3}}$

Bronze Answers

- √2/2
 √7/7
- 3. √13/13
- 4. √6/6
- 5. 2√3/3
 6. 5√11/11
- 7. 3√10/10 8. 4√15/15

Silver Answers

- 1. 3√3
- 2. 4√6/3
- 3. √15/3 4. 4√11
- 5. 2√5
 6. 2√13
- 3√2
 4√15/3

Gold Answers

- 1. $7(5 \sqrt{3})/46$ 2. $19(5 \sqrt{2})/23$
- 3. $12(4 \sqrt{5})/11$ 4. $7(3 + \sqrt{3})/6$
- 5. $13(5 + \sqrt{11})/14$ 6. $(6 \sqrt{3})/33$
- 7. $9(6 + \sqrt{2})/17$ 8. $8(10 \sqrt{3})/97$