



Rationalizing the Denominator

Version 1

Name: _____

Date: _____

Score: _____

Direction: Simplify the radical expression by rationalizing the denominator. Show all your work in the space provided.

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

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

3) $\frac{3}{1-\sqrt{3}}$

4) $\frac{\sqrt{2}}{5-\sqrt{2}}$

5) $\frac{\sqrt{2}}{7-\sqrt{2}}$

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



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

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

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

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

3) $\frac{3}{1-\sqrt{3}}$

$$\frac{-3(1+\sqrt{3})}{2}$$

4) $\frac{\sqrt{2}}{5-\sqrt{2}}$

$$\frac{5\sqrt{2}+2}{23}$$

5) $\frac{\sqrt{2}}{7-\sqrt{2}}$

$$\frac{7\sqrt{2}+2}{47}$$

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

$$\frac{\sqrt{10}-2}{3}$$