



# Rationalizing the Denominator

Version 2

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Score: \_\_\_\_\_

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

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

2)  $\frac{\sqrt{8}}{\sqrt{2} + 3}$

3)  $\frac{\sqrt{3}}{\sqrt{27} - \sqrt{3}}$

4)  $\frac{\sqrt{2} - \sqrt{8}}{2\sqrt{2} - 1}$

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

6)  $\frac{3\sqrt{3} - 2\sqrt{2}}{\sqrt{3} - \sqrt{2}}$



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

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

2)  $\frac{\sqrt{8}}{\sqrt{2}+3}$

$$\frac{6\sqrt{2}-4}{7}$$

3)  $\frac{\sqrt{3}}{\sqrt{27}-\sqrt{3}}$

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

4)  $\frac{\sqrt{2}-\sqrt{8}}{2\sqrt{2}-1}$

$$\frac{-4-\sqrt{2}}{7}$$

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

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

6)  $\frac{3\sqrt{3}-2\sqrt{2}}{\sqrt{3}-\sqrt{2}}$

$$5+\sqrt{6}$$