

Rationalize the Denominator

Date _____ Period _____

Simplify.

1) $\frac{5}{\sqrt{3}}$

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

3) $\frac{\sqrt{5}}{\sqrt{15}}$

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

5) $\frac{\sqrt{4}}{\sqrt{3}}$

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

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

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

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

10) $\frac{4}{4 + \sqrt{2}}$

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

12) $\frac{4}{2 + \sqrt{3}}$

13) $\frac{3 - \sqrt{5}}{5 - \sqrt{5}}$

14) $\frac{\sqrt{5} + \sqrt{3}}{\sqrt{3} - 4}$

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1) $\frac{5}{\sqrt{3}}$

$$\frac{5\sqrt{3}}{3}$$

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

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

3) $\frac{\sqrt{5}}{\sqrt{15}}$

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

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

$$\sqrt{5}$$

5) $\frac{\sqrt{4}}{\sqrt{3}}$

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

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

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

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

$$\frac{4\sqrt{5} + 4\sqrt{2}}{3}$$

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

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

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

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

10) $\frac{4}{4 + \sqrt{2}}$

$$\frac{8 - 2\sqrt{2}}{7}$$

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

$$\frac{-2\sqrt{2} - 2\sqrt{5}}{3}$$

12) $\frac{4}{2 + \sqrt{3}}$

$$8 - 4\sqrt{3}$$

13) $\frac{3 - \sqrt{5}}{5 - \sqrt{5}}$

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

14) $\frac{\sqrt{5} + \sqrt{3}}{\sqrt{3} - 4}$

$$\frac{-\sqrt{15} - 4\sqrt{5} - 3 - 4\sqrt{3}}{13}$$