

Rationalizing the Denominator Worksheets

Name: _____ Date: _____

Direction: Rationalize each denominator. Multiply the numerator and denominator by the given radical to have a rational number in the denominator, and further simplify the expression.

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

2) $\frac{3}{2\sqrt[3]{16}}$

3) $\frac{7}{2\sqrt{2}}$

4) $\frac{2}{\sqrt[3]{9}}$

5) $\frac{16}{\sqrt[3]{36}}$

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

7) $\frac{4}{\sqrt{13}}$

8) $\frac{3}{\sqrt[3]{49}}$

9) $\frac{6}{\sqrt[3]{4}}$

10) $\frac{9}{\sqrt{15}}$

Rationalizing the Denominator Worksheets

Name: _____ Date: _____

ANSWER KEY

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

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

2) $\frac{3}{2\sqrt[3]{16}}$

$\frac{3\sqrt[3]{4}}{8}$

3) $\frac{7}{2\sqrt{2}}$

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

4) $\frac{2}{\sqrt[3]{9}}$

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

5) $\frac{16}{\sqrt[3]{36}}$

$\frac{8\sqrt[3]{6}}{3}$

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

$\frac{\sqrt{6}}{9}$

7) $\frac{4}{\sqrt{13}}$

$\frac{4\sqrt{13}}{13}$

8) $\frac{3}{\sqrt[3]{49}}$

$\frac{3\sqrt[3]{7}}{7}$

9) $\frac{6}{\sqrt[3]{4}}$

$3\sqrt[3]{2}$

10) $\frac{9}{\sqrt{15}}$

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