

Dividing Radical Expressions

Simplify.

$$1) \frac{\sqrt{15}}{5\sqrt{20}}$$

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

$$2) \frac{\sqrt{8}}{\sqrt{100}}$$

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

$$3) \frac{\sqrt{6}}{\sqrt{27}}$$

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

$$4) \frac{3\sqrt{20}}{2\sqrt{4}}$$

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

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

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

$$6) \frac{\sqrt{4}}{5\sqrt{3}}$$

$$\frac{2\sqrt{3}}{15}$$

$$7) \frac{\sqrt{5}}{\sqrt{3}}$$

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

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

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

$$9) \frac{\sqrt{3x^2y^3}}{4\sqrt{5xy^3}}$$

$$\frac{\sqrt{15x}}{20}$$

$$10) \frac{\sqrt{15xy}}{3\sqrt{10xy^3}}$$

$$\frac{\sqrt{6}}{6y}$$

$$11) \frac{3 - 3\sqrt{3a}}{4\sqrt{8a}}$$

$$\frac{3\sqrt{2a} - 3a\sqrt{6}}{16a}$$

$$12) \frac{3n^2 + \sqrt{2n^2}}{\sqrt{10n}}$$

$$\frac{3n\sqrt{10n} + 2\sqrt{5n}}{10}$$

$$13) \frac{4x^3 - 3\sqrt{3x}}{3\sqrt{3x^2}}$$

$$\frac{4x^3\sqrt{3} - 9\sqrt{x}}{9x}$$

$$14) \frac{\sqrt{5k^4} + 3\sqrt{2k}}{\sqrt{3k^3}}$$

$$\frac{k\sqrt{15k} + 3\sqrt{6}}{3k}$$

$$15) \frac{3}{4 + 4\sqrt{5}}$$

$$\frac{-3 + 3\sqrt{5}}{16}$$

$$16) \frac{5}{-5 - 3\sqrt{3}}$$

$$\frac{25 - 15\sqrt{3}}{2}$$

$$17) \frac{5}{-3 - 3\sqrt{3}}$$

$$\frac{5 - 5\sqrt{3}}{6}$$

$$18) \frac{4}{\sqrt{2} - 5\sqrt{3}}$$

$$\frac{-4\sqrt{2} - 20\sqrt{3}}{73}$$

$$19) \frac{2 + 5\sqrt{3}}{-4 + 4\sqrt{2}}$$

$$\frac{2 + 2\sqrt{2} + 5\sqrt{3} + 5\sqrt{6}}{4}$$

$$20) \frac{\sqrt{5} + 2\sqrt{2}}{4 - \sqrt{5}}$$

$$\frac{4\sqrt{5} + 5 + 8\sqrt{2} + 2\sqrt{10}}{11}$$

$$21) \frac{\sqrt{5} + 3}{4 - \sqrt{5}}$$

$$\frac{7\sqrt{5} + 17}{11}$$

$$22) \frac{3 - 4\sqrt{3}}{4\sqrt{5} + 3\sqrt{2}}$$

$$\frac{12\sqrt{5} - 9\sqrt{2} - 16\sqrt{15} + 12\sqrt{6}}{62}$$