

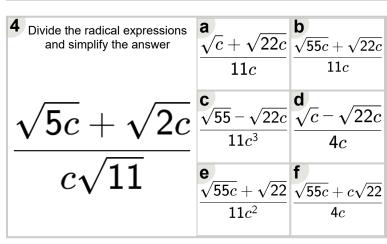
Math worksheet on 'Radicals - Divide Binomials by Monomials (Values and Variables) (Level 2)'. Part of a broader unit on 'Radicals - Division Intro'

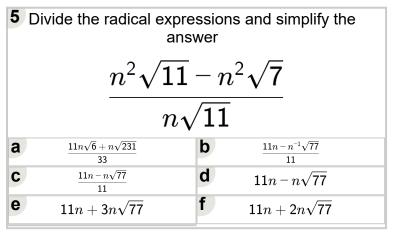
Learn online: app.mobius.academy/math/units/radicals division intro/

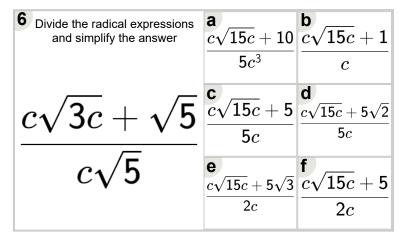
| Divide the radical expressions and simplify the answer | $egin{array}{c} rac{\sqrt{15r}+1}{5r^{-1}} \end{array}$ | $egin{array}{c} oldsymbol{\sqrt{15r}+5} \ \hline 5r \end{array}$ | $egin{array}{c} \sqrt{15r} + 1 \ \hline r \end{array}$ |
|--|--|--|--|
| $r\sqrt{3r} + r\sqrt{5}$ | d | е | f |
| $r^2\sqrt{5}$ | $3\sqrt{15r}+5$ | $\sqrt{15r^{-1}}+5$ | $\sqrt{15r}$ – 5 |
| , , , | r | r | 2r |

| 2 Divide the radical expressions and simplify the answer | $\frac{\mathbf{a}}{\frac{d^3\sqrt{14}+\sqrt{77d}}{7d}}$ | $\frac{\mathbf{b}}{\frac{d^{-1}\sqrt{14} - \sqrt{77d}}{3d}}$ |
|--|--|--|
| $\sqrt{2d} - \sqrt{11}$ | $\frac{\mathbf{C}}{2\sqrt{7}+\sqrt{154d}}\\ \frac{14d}{}$ | $\frac{d}{d\sqrt{14} - \sqrt{77d}}$ |
| $\sqrt{7}d$ | $\frac{\mathbf{e}}{\frac{d^3\sqrt{14} + \sqrt{77d}}{7d^{-1}}}$ | $\frac{\mathbf{f}}{\frac{d^2\sqrt{14}-\sqrt{77d}}{d}}$ |

| Divide the radical expressions and simplify the answer | $\frac{\mathbf{a}}{\frac{y^2\sqrt{143y}+\sqrt{26y}}{13y}}$ | $egin{aligned} \mathbf{b} \ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & \\ & & & \\ & & \\ & & \\ & & & $ |
|--|---|---|
| $\frac{y^2\sqrt{11}+\sqrt{2}}{\sqrt{2}}$ | $\frac{\mathbf{C}}{y^3\sqrt{143}-\sqrt{26y}}\\ \frac{13y^{-1}}{}$ | $\frac{\mathbf{d}}{y^2\sqrt{143y} + 5\sqrt{26y}}$ |
| $\sqrt{13}y$ | $\frac{\mathbf{Q}}{\sqrt{143y} + \sqrt{26y}}$ $\frac{13y^3}{}$ | $\frac{\mathbf{f}}{y^3\sqrt{429y} + \sqrt{78y}}$ $39y$ |







| 7 Divide the radical expressions and simplify the answer | $\frac{2b\sqrt{7b} - \sqrt{182}}{14}$ | $\frac{\mathbf{b}}{\sqrt{14b} - \sqrt{91b}}$ |
|--|---|---|
| $b\sqrt{2b}-\sqrt{13b}$ | \mathbf{c} $b^2\sqrt{14}-\sqrt{91b}$ | $\frac{\mathbf{d}}{\frac{b\sqrt{14b} - \sqrt{91b}}{7}}$ |
| $\sqrt{7}$ | $oldsymbol{e} b\sqrt{14b} + \sqrt{91b}$ | $\frac{\mathbf{f}}{b\sqrt{14} - \sqrt{91b}}$ |