



Math worksheet on 'Radicals - Divide Binomials by Monomials (Values and Variables) (Level 4)'. Part of a broader unit on 'Radicals - Division Intro'

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**2** Divide the radical expressions and simplify the answer

$$\frac{4cp\sqrt{11c} - c\sqrt{3p}}{3cp^2\sqrt{2c}}$$

<b>a</b>	$\frac{4cp\sqrt{22} + 3\sqrt{6cp}}{5cp^2}$	<b>b</b>	$\frac{4c\sqrt{22} - \sqrt{6cp}}{4cp^2}$
<b>c</b>	$\frac{cp\sqrt{22} + \sqrt{6cp}}{6cp}$	<b>d</b>	$\frac{4c^3p\sqrt{22} - \sqrt{6cp}}{cp^2}$
<b>e</b>	$\frac{4cp\sqrt{22} - \sqrt{6cp}}{6cp^2}$	<b>f</b>	$\frac{4cp\sqrt{22} - \sqrt{6cp}}{cp^2}$

**4** Divide the radical expressions and simplify the answer

$$\frac{4\sqrt{5r} + rc\sqrt{11r}}{3\sqrt{3}}$$

<b>a</b>	$\frac{4\sqrt{15r} + rc\sqrt{33r}}{9}$	<b>b</b>	$4\sqrt{15} + rc\sqrt{33r}$
<b>c</b>	$\frac{4\sqrt{30r} + rc\sqrt{66r^{-1}}}{18}$	<b>d</b>	$4\sqrt{3r} + rc\sqrt{33r}$
<b>e</b>	$\frac{4\sqrt{15r} + r^2c\sqrt{33r}}{9}$	<b>f</b>	$4\sqrt{15r} + rc\sqrt{33r^{-1}}$

**6** Divide the radical expressions and simplify the answer

$$\frac{x\sqrt{5} + 2xz^2\sqrt{2x}}{3z\sqrt{7z}}$$

<b>a</b>	$\frac{\sqrt{35z} + 2z^2x\sqrt{14zx}}{21}$	<b>b</b>	$\frac{x\sqrt{35z} - 2z^3x\sqrt{14x}}{21z^3}$
<b>c</b>	$\frac{x\sqrt{35} + 2z^2x\sqrt{14zx}}{21z^4}$	<b>d</b>	$\frac{x\sqrt{35z^{-1}} + 2z^2x\sqrt{14zx}}{21}$
<b>e</b>	$\frac{x^3\sqrt{35z} - 2z^2x\sqrt{14zx}}{21z^4}$	<b>f</b>	$\frac{x\sqrt{35z} + 2z^2x\sqrt{14zx}}{21z^2}$

**1** Divide the radical expressions and simplify the answer

$$\frac{m\sqrt{11} + 4b^2\sqrt{3}}{3m^2\sqrt{3}}$$

<b>a</b>	$\frac{m + 12b^2}{9m}$	<b>b</b>	$\frac{m^2\sqrt{33} + 12b^2}{9m^3}$
<b>c</b>	$\frac{\sqrt{33} + 12mb^2}{3m}$	<b>d</b>	$\frac{m\sqrt{33} + 12m^{-1}b^2}{9m^2}$
<b>e</b>	$\frac{m\sqrt{33} + 12}{m^2}$	<b>f</b>	$\frac{m\sqrt{33} + 12b^2}{9m^2}$

**3** Divide the radical expressions and simplify the answer

$$\frac{3d^2p^2\sqrt{13} - p\sqrt{3}}{3d^2p\sqrt{3}}$$

<b>a</b>	$\frac{d^2p\sqrt{3} - 1}{3d^2p^{-1}}$	<b>b</b>	$\frac{d^2p\sqrt{39} - 2}{d^2}$
<b>c</b>	$\frac{d^2p\sqrt{39} - 1}{3d^2p}$	<b>d</b>	$\frac{3d^2p\sqrt{13} + \sqrt{3}}{9d^2}$
<b>e</b>	$\frac{d^2p + 1}{d^2}$	<b>f</b>	$\frac{d^2p\sqrt{39} - 1}{3d^2}$

**5** Divide the radical expressions and simplify the answer

$$\frac{x^2y\sqrt{2} + 2y\sqrt{5xy}}{3x^2y^2\sqrt{7}}$$

<b>a</b>	$\frac{x\sqrt{14} + 2\sqrt{35y}}{21xy^{-1}}$	<b>b</b>	$\frac{x\sqrt{14} + 2\sqrt{35y}}{21xy}$
<b>c</b>	$\frac{x^2\sqrt{14} + 2y\sqrt{35x}}{21x^2}$	<b>d</b>	$\frac{x\sqrt{14} - 2\sqrt{35xy}}{21y}$
<b>e</b>	$\frac{x^2\sqrt{14} + 2\sqrt{35xy}}{21x^2y}$	<b>f</b>	$\frac{x^2\sqrt{14} + \sqrt{35xy}}{21x^2y}$

**7** Divide the radical expressions and simplify the answer

$$\frac{2z\sqrt{11} - n\sqrt{5nz}}{3z\sqrt{7nz}}$$

<b>a</b>	$\frac{2\sqrt{77nz} + n\sqrt{35}}{42z}$	<b>b</b>	$\frac{2\sqrt{77nz} + zn^2\sqrt{35}}{21zn^3}$
<b>c</b>	$\frac{3\sqrt{77nz} - n^2\sqrt{35}}{21zn}$	<b>d</b>	$\frac{2\sqrt{77nz} - n^2\sqrt{35}}{zn}$
<b>e</b>	$\frac{2\sqrt{77z} - n^2\sqrt{35}}{zn}$	<b>f</b>	$\frac{2\sqrt{77nz} - n^2\sqrt{35}}{21zn}$