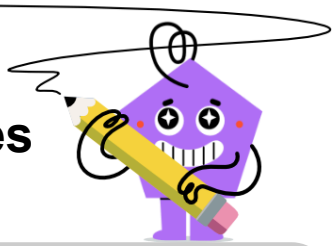
Name

Radicals - Multiplying Binomials (Values and Variables)



1 $(2b\sqrt{2b} - r^2\sqrt{11}) \cdot (3r\sqrt{11b} + rb^2\sqrt{7r})$

Multiply the radical expressions and simplify the answer

A	B	C	D	E
$6rb^2\sqrt{22b} + 11r^3\sqrt{b} - 2rb^3\sqrt{14rb} - r^3b^2\sqrt{77r}$	$6rb^2\sqrt{22} - 22r^3\sqrt{b^3} + 2rb^3\sqrt{14rb} - r^3b^2\sqrt{77r}$	$6rb^2\sqrt{22} - 33r^3\sqrt{b} + 2rb^3\sqrt{14rb} - r^3b^2\sqrt{77r}$	$6rb^2\sqrt{22} - 3r^3\sqrt{b} + 2rb^3\sqrt{14rb} - r^3b^2\sqrt{77r}$	$6rb^2\sqrt{22} - 11r^3\sqrt{b} + 2rb^3\sqrt{14rb} + r^3b^2\sqrt{77}$

2 $(2z^2\sqrt{3} + rz\sqrt{7r}) \cdot (z\sqrt{7z} - 2z\sqrt{11rz})$

Multiply the radical expressions and simplify the answer

A	B	C	D	E
$2z^3\sqrt{21z} - 4z^3r\sqrt{33z} + 7rz^2\sqrt{rz} + 2r^2z^2\sqrt{77z}$	$2z^3\sqrt{21z} + 4z^3\sqrt{33rz^{-1}} + 7rz^2\sqrt{rz} - 2r^2z^2\sqrt{77z^{-1}}$	$2z^3\sqrt{21} - 4z^3\sqrt{33rz} + 7rz^2\sqrt{rz} + 2r^2z^2\sqrt{77z^{-1}}$	$2z^3\sqrt{21z} - 4z^3\sqrt{33rz} + 7rz^2\sqrt{rz} - 2r^2z^2\sqrt{77z}$	$2z^3\sqrt{21z} - 4z^3\sqrt{33rz} + 7rz^2\sqrt{rz} + 5r^2z^2\sqrt{77z}$

3 $(2r^2d\sqrt{3} - d^2\sqrt{11}) \cdot (3d\sqrt{3r} + r^2d^2\sqrt{7})$

Multiply the radical expressions and simplify the answer

A	B	C	D	E
$18d^2r^4\sqrt{r} - 3d^3\sqrt{33r} + 2r^4d^3\sqrt{21} - r^2d^4\sqrt{77}$	$18d^2r^2 - 3d^3\sqrt{33r} + 2r^2d^3\sqrt{21} - r^2d^4\sqrt{77}$	$18d^2r^{2.5} - 3d^3\sqrt{33r} + 2r^2d^3\sqrt{21} - 2r^2d^4\sqrt{77}$	$18d^2r^4\sqrt{r} - d^3\sqrt{33r} + 2r^4d^3\sqrt{21} + r^2d^4\sqrt{77}$	$18d^2r^2\sqrt{r} - 3d^3\sqrt{33r} + 2r^4d^3\sqrt{21} - r^2d^4\sqrt{77}$

4 $(3n^2x^2\sqrt{7} - n^2x^2\sqrt{7}) \cdot (x\sqrt{5} - 4x\sqrt{3n})$

Multiply the radical expressions and simplify the answer

A	B	C	D	E
$2x^3n^2\sqrt{35} - 8x^3n^2\sqrt{21n}$	$3x^3n^2\sqrt{35} - x^3n^2 + 12x^3n^2\sqrt{21n} - 4x^3n^2\sqrt{21n^{-1}}$	$3x^3n^2\sqrt{35} - x^3\sqrt{35} + 12x^3n^2\sqrt{21n} - 4xn^2\sqrt{21n}$	$2x^3n^2\sqrt{35} - 12x^3n^2\sqrt{21n} + 4x^3n^2\sqrt{21}$	$3x^3n^2\sqrt{35} - x^3n\sqrt{35} - 12x^3n^2\sqrt{21n} + 4x^3n^2\sqrt{21}$

5 $(p^2d^2\sqrt{7} + 4p\sqrt{7}) \cdot (d\sqrt{7pd} - 2p^2d\sqrt{3d})$

Multiply the radical expressions and simplify the answer

A	B	C	D	E
$7p^2d^2\sqrt{pd} + 2p^4d^4\sqrt{21d} - 28pd\sqrt{pd} - 8p^3d\sqrt{3d}$	$7p^2d^2\sqrt{pd} - 2p^4d^4\sqrt{d} + 28p^{-1}d\sqrt{pd} - 8p^3d\sqrt{21d}$	$7p^3d^2\sqrt{pd} - 2p^4d^4\sqrt{21d} - 28pd\sqrt{pd} - 8p^3d\sqrt{21d}$	$7p^2d^2\sqrt{pd} - 2p^4d^4\sqrt{21d} - 28pd\sqrt{pd} - p^3d\sqrt{21d}$	$7p^2d^2\sqrt{pd} - 2p^4d^4\sqrt{21d} + 28pd\sqrt{pd} - 8p^3d\sqrt{21}$

6 $(2np^2\sqrt{3n} + n^2p\sqrt{2p}) \cdot (n^2\sqrt{13p} - 5n^2p\sqrt{7})$

Multiply the radical expressions and simplify the answer

A	B	C	D	E
$2n^2p^2\sqrt{39np} - 10n^3p^3\sqrt{21n} - n^3p^2\sqrt{26} + 5n^3p^2\sqrt{14p}$	$2n^2p^2\sqrt{39np} - 10n^3p^3\sqrt{21n} + n^3p^2\sqrt{26} - n^3p\sqrt{14p}$	$2n^2p^2\sqrt{39np} - 10n^3p^3\sqrt{21n} + n^3p^2\sqrt{26} - 5n^3p^2\sqrt{14p}$	$2n^2p^2\sqrt{39np} - 10n^3p^3 - n^3p^2\sqrt{26} - 5n^3p^2\sqrt{14p}$	$2n^2p^2\sqrt{39np} - 10n^3p^3\sqrt{21n} + n^3p^2\sqrt{26} - 5n^3p^2\sqrt{14p}$

7 $(3\sqrt{13mp} + mp\sqrt{2p}) \cdot (mp\sqrt{7p} - 2mp\sqrt{3p})$

Multiply the radical expressions and simplify the answer

A	B	C	D	E
$3m^2p^2\sqrt{91m} - 2m^2p^3\sqrt{14} - 6m^2p^2\sqrt{39m} + 2m^2p^3\sqrt{6}$	$3m^2p^2\sqrt{91m} + mp^2\sqrt{14p} + 6mp^2\sqrt{39m} - 2m^2p^3\sqrt{6}$	$3m^2p^2\sqrt{91m} + m^2p^3\sqrt{14p} - 6mp^2\sqrt{39m} - 2m^2p^3\sqrt{2}$	$3m^2p^2\sqrt{91m} + m^2p^3\sqrt{14} - 6mp^2\sqrt{39m} - 2m^2p^4\sqrt{6}$	$3m^2p^2\sqrt{91m} + m^2p^3\sqrt{14} - 6mp^2\sqrt{39m} - 2m^2p^3\sqrt{6}$

8 $(5b\sqrt{7d} - b\sqrt{7d}) \cdot (db^2\sqrt{13d} + 2d^2b\sqrt{5})$

Multiply the radical expressions and simplify the answer

A	B	C	D	E
$4d^2b^3\sqrt{91} - 10d^2b^2\sqrt{35d} - 5d^2b^3\sqrt{35d}$	$12d^2b^2\sqrt{35d}$	$4d^2b^3\sqrt{91} - 12d^2b^2\sqrt{35d}$	$6d^2b^3\sqrt{91} + 10d^2b^2\sqrt{35d} - 2d^2b^4\sqrt{d}$	$5d^2b^3\sqrt{91} - d^2b^3\sqrt{91d} + 10d^2b^2\sqrt{35d} - 2d^2b^2\sqrt{35}$