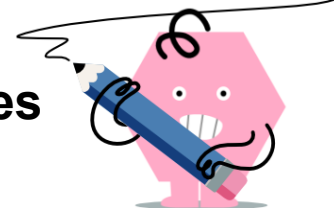




Radicals - Multiplying Binomials (Values and Variables)



1 Multiply the radical expressions and simplify the answer

$$(\sqrt{7r} + 4r) \cdot (r^2\sqrt{5} - 4r)$$

$\text{A } \sqrt{35r} - 4r^2\sqrt{7r} + 4r^3\sqrt{5} - 16r^2$	$\text{B } \sqrt{35r-1} - 4r^2\sqrt{7} + 4r^3\sqrt{5} - 16r^2$
$\text{C } r^2\sqrt{r} + 4r\sqrt{7r} - r^3\sqrt{5} - 16r^2$	$\text{D } \sqrt{35r} - 4r\sqrt{7r} + 4r^3\sqrt{5} - 16r^2$
$\text{E } \sqrt{35r} + 4r\sqrt{7} + 4r^3\sqrt{5} - 16r^2$	

2 $(4x\sqrt{x} - x^2\sqrt{5}) \cdot (3x^2 + x\sqrt{13})$

Multiply the radical expressions and simplify the answer

A	B	C	D	E
$12x^4\sqrt{x} + 3x^4\sqrt{5} + 4x^2\sqrt{13x} - 5x^4\sqrt{65}12x^3\sqrt{x} - 3x^4\sqrt{5} + 4x^2\sqrt{13x} - x^4\sqrt{65}12x^3\sqrt{x} - 3x^4\sqrt{5} + 4x^2\sqrt{13x} + x^4\sqrt{65}12x^3\sqrt{x} - 3x^4\sqrt{5} + 4x^2\sqrt{13x} + x^4\sqrt{65}12x^3\sqrt{x} - 3x^4\sqrt{5} - 4x^2\sqrt{13x} - 3x^4\sqrt{65}$				

3 Multiply the radical expressions and simplify the answer

$$(5r\sqrt{r} - \sqrt{5r}) \cdot (r\sqrt{11r} - 3r^2)$$

$\text{A } 5r^3\sqrt{11} - 15r^3\sqrt{r} + r\sqrt{55r} + 3r^4\sqrt{5r}$	$\text{B } 5r^3\sqrt{11} - r^3\sqrt{r} - r^2\sqrt{55} + 3r^2\sqrt{5r-1}$
$\text{C } 5r^2\sqrt{11} - 15r^3\sqrt{r-1} - r^2\sqrt{55} + 3r^2\sqrt{5r}$	$\text{D } 5r^3\sqrt{11} - 15r^3\sqrt{r} - r^2\sqrt{55} + 3r^2\sqrt{5r}$
$\text{E } 5r^3\sqrt{11} - 15r^3\sqrt{r} - r^2\sqrt{55} + 3\sqrt{5}$	

4 Multiply the radical expressions and simplify the answer

$$(3r + r^2\sqrt{2}) \cdot (4r\sqrt{r} - \sqrt{13r})$$

$\text{A } r^2\sqrt{r} + 4r^3\sqrt{2r} - 3r\sqrt{13r} - r^2\sqrt{26r}$	$\text{B } -4r^3\sqrt{2r} - 3r\sqrt{13r} - r^2\sqrt{26r}$
$\text{C } r^2\sqrt{r} + 4r^4\sqrt{2r} - 3r\sqrt{13r} - r^2\sqrt{26r}$	$\text{D } r^3\sqrt{r} + 4r^3\sqrt{2r} - 5r\sqrt{13r} + r^2\sqrt{26r}$
$\text{E } r^2\sqrt{r} + 4r^3\sqrt{2r} - 3r\sqrt{13r} - r^2$	

5 Multiply the radical expressions and simplify the answer

$$(3\sqrt{p} + \sqrt{2}) \cdot (p\sqrt{2p} + 5)$$

$\text{A } p^2\sqrt{2} - 15\sqrt{p} + 2p\sqrt{p} + \sqrt{2}$	$\text{B } p^2\sqrt{2} + 15\sqrt{p} + 2p\sqrt{p} + 5\sqrt{2}$
$\text{C } 3p\sqrt{2} + 15\sqrt{3p} + 2p\sqrt{p} + 5\sqrt{2}$	$\text{D } 3p^2\sqrt{2} + 17p\sqrt{p} + \sqrt{2}$
$\text{E } 3p\sqrt{2p} - 15\sqrt{p} + 6p\sqrt{p} + 5\sqrt{2}$	

6 $(5\sqrt{x} + x^2\sqrt{13}) \cdot (x\sqrt{5x} + 3x\sqrt{x})$

Multiply the radical expressions and simplify the answer

A	B	C	D	E
$x^2\sqrt{5} + x^4\sqrt{65x} - 15x^2 + 3x^2\sqrt{13x}5x^2\sqrt{5} + x^4\sqrt{65x} + 15x^2 + 3x^2\sqrt{13x}5x^2\sqrt{5} + x^4\sqrt{65x} + 15x^2 - 3x^2\sqrt{13x}5x^2\sqrt{5} + x^4\sqrt{65x} + 15x^2 - 3x^2\sqrt{13x}5x^2\sqrt{5} + x^4\sqrt{65x} + 15x^2 - x^4\sqrt{13x}$				

7 Multiply the radical expressions and simplify the answer

$$(4c + \sqrt{13c}) \cdot (\sqrt{7c} + 3c\sqrt{c})$$

$\text{A } 4c\sqrt{7c} + 12c^2\sqrt{c} + \sqrt{91} + 3c\sqrt{13}$	$\text{B } 4c\sqrt{7c} + 12c^3\sqrt{c} + c\sqrt{91} + 3c\sqrt{13}$
$\text{C } 4c\sqrt{7c} + 12c^2\sqrt{c} + c\sqrt{91} + 4c^4\sqrt{13}$	$\text{D } 4c\sqrt{7c} + 12c^2\sqrt{c} + c\sqrt{91} + 3c^2\sqrt{13}$
$\text{E } 4c\sqrt{7c} + 12c^2\sqrt{c} + \sqrt{91}c - 3c^3\sqrt{13}$	

8 Multiply the radical expressions and simplify the answer

$$(3b^2 - b^2\sqrt{7}) \cdot (b\sqrt{2b} - 4b^2)$$

$\text{A } b^3\sqrt{2} - b^3\sqrt{14b} - 12b^4 + 4b^2\sqrt{7}$	$\text{B } 3b^3\sqrt{2b} - b^3\sqrt{14b} - 12b + 4b^4\sqrt{7}$
$\text{C } 3b^3\sqrt{2b} - b^3\sqrt{14b} - 12b^4 + 4b^4\sqrt{7}$	$\text{D } 3b^3\sqrt{2b} - b\sqrt{14b} + 12b^4 + 4b^5\sqrt{7}$
$\text{E } 5b^3\sqrt{2b} - b^3\sqrt{b} - 12b^4 + 4b^5\sqrt{7}$	