mobius

Radicals - Multiplying Binomials (Values Only)

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1 Multiply the radical expressions and simplify the answer

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

A $25\sqrt{6} - 5\sqrt{33} + 10 - \sqrt{22}$	B $35 - 4\sqrt{33} + \sqrt{22}$
C $25\sqrt{2} + 5 + \sqrt{22}$	D $25\sqrt{6} - 9 - \sqrt{22}$
E $25\sqrt{6} - 4\sqrt{33} - 2 - \sqrt{22}$	

2 Multiply the radical expressions and simplify the answer

$$(\sqrt{11} - 2\sqrt{13}) \cdot (\sqrt{2} + 3\sqrt{7})$$

A $\sqrt{22} + 3\sqrt{77} - 2\sqrt{26} - \sqrt{91}$	B $\sqrt{22} + 3\sqrt{77} - 2\sqrt{26} - 6\sqrt{91}$
C $\sqrt{22} - 3\sqrt{77} - 2\sqrt{26} + 6\sqrt{91}$	D $4 + 2\sqrt{26} - 6\sqrt{91}$
E $\sqrt{22} + 3\sqrt{77} - 2\sqrt{26} + \sqrt{91}$	

3 Multiply the radical expressions and simplify the answer

$$(3\sqrt{7} + \sqrt{2}) \cdot (\sqrt{5} - 3\sqrt{2})$$

A $4\sqrt{35} - 9\sqrt{14} + \sqrt{10} - 2$	B $4\sqrt{35} - 9\sqrt{14} - 5$
C $3\sqrt{35} - 9\sqrt{14} + 4\sqrt{10} + 6$	D $3\sqrt{35} - 9\sqrt{14} + \sqrt{10} - 6$
E $3\sqrt{35} + \sqrt{14} + \sqrt{10} - 6$	

4 Multiply the radical expressions and simplify the answer

$$(2\sqrt{11} + \sqrt{13}) \cdot (2\sqrt{11} - \sqrt{2})$$

A $44 + 2\sqrt{143} - \sqrt{22} - 5\sqrt{26}$	B $44 + 3\sqrt{143} - 3\sqrt{22} - \sqrt{26}$
C $13 + 2\sqrt{22} - \sqrt{26}$	D $31 + 2\sqrt{143} - 2\sqrt{22}$
E $44 + 2\sqrt{143} - 2\sqrt{22} - \sqrt{26}$	

5 Multiply the radical expressions and simplify the answer

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

A $6\sqrt{65} - 2 + 4\sqrt{15}$	B $2\sqrt{65} - \sqrt{15} - 1$
C $-3\sqrt{65} + 1 - 2\sqrt{15}$	D $-2\sqrt{65} - \sqrt{15}$
E $-2\sqrt{65} + 1 - \sqrt{15}$	

6 Multiply the radical expressions and simplify the answer

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

A $12 + \sqrt{10}$	B $40 + 4\sqrt{10}$
C $40 + 6\sqrt{10}$	D $20 - \sqrt{10} + 1$
E $30 + 5\sqrt{2} + 3\sqrt{3} + \sqrt{10}$	

7 Multiply the radical expressions and simplify the answer

$$(2\sqrt{11} - \sqrt{2}) \cdot (\sqrt{3} + 2\sqrt{2})$$

A $2\sqrt{33} - \sqrt{6} - \sqrt{22} + 2\sqrt{2}$	B $2\sqrt{33} + 3 + 4$
C $2\sqrt{33} - \sqrt{6} + 4\sqrt{22} - 4$	D $4\sqrt{33} - \sqrt{6} - \sqrt{22} + 4$
E $2\sqrt{33} - \sqrt{6} + \sqrt{22} - 4$	

8 Multiply the radical expressions and simplify the answer

$$(5\sqrt{2} - \sqrt{5}) \cdot (\sqrt{13} - 3\sqrt{5})$$

A $10 - 15\sqrt{10} - \sqrt{65}$	B $\sqrt{26} + 15\sqrt{10} - \sqrt{65} + 15$
C $5\sqrt{26} - 15\sqrt{10} + \sqrt{65} + 2$	D $5\sqrt{26} - 15\sqrt{10} - \sqrt{65} + 15$
E $-10 - \sqrt{65} + 15$	