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Math worksheet on *'Radicals - Multiplying Binomials (Values Only) (Level 2)'*. Part of a broader unit on *'Radicals - Multiplication Intro'*

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1 Multiply the radical expressions and simplify the answer

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

a	$-8 + 2\sqrt{21}$	b	4
c	$6 - \sqrt{21} - 3$	d	$-2 + 3\sqrt{21}$
e	$4 - \sqrt{21} - 3$	f	$5 - \sqrt{21} - 1$

2 Multiply the radical expressions and simplify the answer

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

a	$\sqrt{33} + 12 + \sqrt{22}$	b	$\sqrt{33} + \sqrt{6} + 11 + \sqrt{3}$
c	$\sqrt{33} + \sqrt{6} - 11 + \sqrt{22}$	d	$\sqrt{33} + \sqrt{6} - 11 + 2\sqrt{22}$
e	$\sqrt{33} - 10 - \sqrt{22}$	f	$\sqrt{33} + \sqrt{6} + 11 + \sqrt{22}$

3 Multiply the radical expressions and simplify the answer

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

a	$\sqrt{33} + 7$	b	$\sqrt{2} + \sqrt{77} - \sqrt{21} - 7$
c	$\sqrt{33} + \sqrt{77} - 6$	d	$-6 - \sqrt{77} + 2\sqrt{21}$
e	$\sqrt{33} + \sqrt{77} - \sqrt{21} - 7$	f	$\sqrt{33} - \sqrt{77} - \sqrt{21} - 7$

4 Multiply the radical expressions and simplify the answer

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

a	$1 + \sqrt{22} + \sqrt{21} + \sqrt{77}$	b	$\sqrt{6} + \sqrt{22} + \sqrt{21} + \sqrt{77}$
c	$\sqrt{6} + \sqrt{22} + \sqrt{21} - 5\sqrt{77}$	d	$\sqrt{6} - \sqrt{22} + 1 + 3\sqrt{77}$
e	$\sqrt{2} + \sqrt{22} + \sqrt{21} - \sqrt{77}$	f	$\sqrt{6} + 1 + \sqrt{21} - \sqrt{77}$

5 Multiply the radical expressions and simplify the answer

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

a	$5\sqrt{15} + \sqrt{35} - \sqrt{6} + \sqrt{3}$	b	$\sqrt{15} + 5\sqrt{35} + \sqrt{6} + \sqrt{2}$
c	$4 + \sqrt{35} - \sqrt{6} + \sqrt{14}$	d	$\sqrt{15} + \sqrt{35} + \sqrt{6} + \sqrt{14}$
e	$1 + \sqrt{35} - \sqrt{6} + \sqrt{14}$	f	$\sqrt{15} + 2\sqrt{35} - \sqrt{6} + \sqrt{14}$

6 Multiply the radical expressions and simplify the answer

$$(\sqrt{7} + \sqrt{13}) \cdot (\sqrt{5} + \sqrt{13})$$

a	$\sqrt{35} + 2 + 13$	b	$-12 + \sqrt{91} + \sqrt{65}$
c	$17 + \sqrt{91} + \sqrt{65}$	d	$\sqrt{35} + \sqrt{91} + \sqrt{65} + 13$
e	$\sqrt{35} + 4\sqrt{91} + 14$	f	$\sqrt{35} + \sqrt{91} + \sqrt{65} + 52$

7 Multiply the radical expressions and simplify the answer

$$(\sqrt{5} + \sqrt{11}) \cdot (\sqrt{7} + \sqrt{7})$$

a	$2\sqrt{35} + 2\sqrt{77}$	b	$1 + \sqrt{35}$
c	$5\sqrt{35} + 1 + \sqrt{77}$	d	$2\sqrt{35}$
e	$5\sqrt{35} + \sqrt{77}$	f	$4\sqrt{35} + 1 + 2\sqrt{77}$