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

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1 Multiply the radical expressions and simplify the answer

$$\sqrt{5} \cdot \left(n^2\sqrt{11} - \sqrt{3n}\right)$$

a	$n^2\sqrt{55} - n\sqrt{15}$	**b**	$n^2\sqrt{55} - \sqrt{15n}$
c	$\sqrt{55} - \sqrt{15n}$	**d**	$n^2\sqrt{55} - \sqrt{2n}$
e	$n^2\sqrt{55} - n\sqrt{15n}$	**f**	$n\sqrt{55} - \sqrt{15n}$

2 Multiply the radical expressions and simplify the answer

$$n\sqrt{3n} \cdot \left(n\sqrt{13n} - \sqrt{13}\right)$$

a	$5n^3\sqrt{39} - n\sqrt{39n}$	**b**	$n^3\sqrt{39} - n\sqrt{39n}$
c	$n^3\sqrt{39} - n^2\sqrt{39}$	**d**	$n^3\sqrt{39} - n\sqrt{n}$
e	$n^3\sqrt{39} - n^2\sqrt{39n}$	**f**	$n^3 - n\sqrt{39n}$

3 Multiply the radical expressions and simplify the answer

$$\left(\sqrt{7d} + \sqrt{13}\right) \cdot d^2\sqrt{2}$$

a	$d^2\sqrt{14d} + d^4\sqrt{26}$	**b**	$d^2\sqrt{14d} + \sqrt{26}$
c	$2d^2\sqrt{14d} + d^2\sqrt{26}$	**d**	$d^2\sqrt{14d} + d^2\sqrt{26}$
e	$d\sqrt{14d} + d^2\sqrt{26}$	**f**	$d^2\sqrt{d} + d^2\sqrt{26}$

4 Multiply the radical expressions and simplify the answer

$$\sqrt{5} \cdot \left(\sqrt{2} + z\sqrt{11}\right)$$

a	$\sqrt{10} + z$	**b**	$\sqrt{10} + z^{-1}\sqrt{55}$
c	$\sqrt{10} + z\sqrt{55}$	**d**	$4\sqrt{10} + z\sqrt{55}$
e	$1 + z\sqrt{55}$	**f**	$5\sqrt{10} + z\sqrt{55}$

5 Multiply the radical expressions and simplify the answer

$$n\sqrt{13} \cdot \left(n^2\sqrt{3} + n\sqrt{5}\right)$$

a	$n^3\sqrt{39} + n^4\sqrt{65}$	**b**	$2n^3\sqrt{39} + n^2\sqrt{65}$
c	$n^3\sqrt{39} + \sqrt{65}$	**d**	$n^2\sqrt{39} + n^2\sqrt{65}$
e	$n^3 + n^2\sqrt{65}$	**f**	$n^3\sqrt{39} + n^2\sqrt{65}$

6 Multiply the radical expressions and simplify the answer

$$\sqrt{2} \cdot \left(\sqrt{2} - \sqrt{5}\right)$$

a	$1 - \sqrt{10}$	**b**	$8 - \sqrt{10}$
c	1	**d**	$\sqrt{2} - \sqrt{10}$
e	$2 - \sqrt{10}$	**f**	$2 - \sqrt{3}$

7 Multiply the radical expressions and simplify the answer

$$\left(\sqrt{13z} + z\sqrt{3z}\right) \cdot z\sqrt{2}$$

a	$z^{-1}\sqrt{26z} + z^2\sqrt{6z}$	**b**	$z\sqrt{26z} + z^2\sqrt{z}$
c	$z\sqrt{26} + z^2\sqrt{6z}$	**d**	$z\sqrt{26z} + z^3\sqrt{6z}$
e	$z^2\sqrt{26z} + z^2\sqrt{6z}$	**f**	$z\sqrt{26z} + z^2\sqrt{6z}$