



Math worksheet on 'Radicals - Multiplying Monomials (Values and Variables) (Level 3)'. Part of a broader unit on 'Radicals - Multiplication Intro'

Learn online: app.mobius.academy/math/units/radicals_multiplication_intro/

2 Multiply the radical expressions and simplify the answer

$$\sqrt{45nx^4} \cdot \sqrt{44n^3x^3}$$

- | | | | |
|----------|----------------------|----------|---------------------|
| a | $6n^2x^3\sqrt{55}$ | b | $6n^2x^4\sqrt{55}$ |
| c | $6n^2x^3\sqrt{55nx}$ | d | $6n^2x^4\sqrt{55x}$ |
| e | $24n^2x^3\sqrt{55x}$ | f | $6n^2x^3\sqrt{55x}$ |

4 Multiply the radical expressions and simplify the answer

$$\sqrt{44y^3d^2} \cdot \sqrt{63y^3d}$$

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|----------|-------------------|----------|---------------------|
| a | $6y^3d\sqrt{77d}$ | b | $6y^3d^2\sqrt{77d}$ |
| c | $y^3d\sqrt{d}$ | d | $12y^3d\sqrt{77d}$ |
| e | $6y^3d\sqrt{77}$ | f | $30y^3d\sqrt{77d}$ |

6 Multiply the radical expressions and simplify the answer

$$\sqrt{28p^3} \cdot \sqrt{32y^3p^3}$$

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|----------|---------------------|----------|--------------------|
| a | $8p^3y^2\sqrt{14y}$ | b | $8p^3y\sqrt{14y}$ |
| c | $16p^3y\sqrt{14y}$ | d | $8p^3y\sqrt{14py}$ |
| e | $8p^2y\sqrt{14y}$ | f | $p^3y\sqrt{y}$ |

1 Multiply the radical expressions and simplify the answer

$$\sqrt{12b^3d^2} \cdot \sqrt{27b^3d^2}$$

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|----------|--------------------|----------|------------|
| a | b^3d^2 | b | $18b^3d^2$ |
| c | $18b^3d$ | d | $54b^3d^2$ |
| e | $18b^2d^2\sqrt{b}$ | f | $18b^2d^2$ |

3 Multiply the radical expressions and simplify the answer

$$\sqrt{80p^3x^2} \cdot \sqrt{52x^2}$$

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|----------|--------------------|----------|-------------------|
| a | $px^2\sqrt{p}$ | b | $8px^2\sqrt{65}$ |
| c | $8px^3\sqrt{65p}$ | d | $8px\sqrt{65p}$ |
| e | $8px^2\sqrt{65px}$ | f | $8px^2\sqrt{65p}$ |

5 Multiply the radical expressions and simplify the answer

$$\sqrt{28x^3} \cdot \sqrt{52y^2}$$

- | | | | |
|----------|-------------------|----------|-------------------|
| a | $4xy\sqrt{91x}$ | b | $4x^2y\sqrt{91x}$ |
| c | $4xy^2\sqrt{91x}$ | d | $4y\sqrt{91x}$ |
| e | $4x\sqrt{91x}$ | f | $12xy\sqrt{91x}$ |

7 Multiply the radical expressions and simplify the answer

$$\sqrt{52b^2} \cdot \sqrt{18b^3r^4}$$

- | | | | |
|----------|----------------------|----------|---------------------|
| a | $6b^2r\sqrt{26b}$ | b | $6b^2r^2\sqrt{26b}$ |
| c | $6b^3r^2\sqrt{26}$ | d | $6b^2r^3\sqrt{26b}$ |
| e | $30b^2r^2\sqrt{26b}$ | f | $6br^2\sqrt{26b}$ |