



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

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

1 Multiply the radical expressions and simplify the answer

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

- | | | | |
|---|--------------------------|---|--------------------------|
| a | $\sqrt{15} + 3\sqrt{35}$ | b | $2\sqrt{15} + \sqrt{35}$ |
| c | $3\sqrt{15} + \sqrt{35}$ | d | $\sqrt{15} + \sqrt{35}$ |
| e | $\sqrt{15} + 1$ | f | $\sqrt{15} + 2\sqrt{35}$ |

2 Multiply the radical expressions and simplify the answer

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

- | | | | |
|---|------------------|---|------------------|
| a | $\sqrt{77} + 7$ | b | $\sqrt{77} + 1$ |
| c | $\sqrt{77} + 28$ | d | $\sqrt{77} + 35$ |
| e | 8 | f | $3\sqrt{77} + 7$ |

3 Multiply the radical expressions and simplify the answer

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

- | | | | |
|---|------------------------|---|------------------|
| a | $\sqrt{26} + 1$ | b | $\sqrt{26} + 2$ |
| c | 3 | d | $5\sqrt{26} + 2$ |
| e | $\sqrt{26} + \sqrt{2}$ | f | $\sqrt{26} + 10$ |

4 Multiply the radical expressions and simplify the answer

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

- | | | | |
|---|--------------------------|---|--------------------------|
| a | $1 + \sqrt{55}$ | b | $\sqrt{33} + 2\sqrt{55}$ |
| c | $\sqrt{33} + 1$ | d | $\sqrt{33} + \sqrt{55}$ |
| e | $2\sqrt{33} + \sqrt{55}$ | f | $5\sqrt{33} + \sqrt{55}$ |

5 Multiply the radical expressions and simplify the answer

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

- | | | | |
|---|--------------------------|---|--------------------------|
| a | $1 + \sqrt{65}$ | b | $\sqrt{26} + 3\sqrt{65}$ |
| c | $\sqrt{26} + \sqrt{65}$ | d | $\sqrt{26} + 1$ |
| e | $\sqrt{26} + 5\sqrt{65}$ | f | $2 + \sqrt{65}$ |

6 Multiply the radical expressions and simplify the answer

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

- | | | | |
|---|--------------------|---|--------------------|
| a | $\sqrt{143} + 13$ | b | $5\sqrt{143} + 13$ |
| c | $4\sqrt{143} + 13$ | d | $2\sqrt{143} + 13$ |
| e | $\sqrt{143} + 1$ | f | $\sqrt{143} + 26$ |

7 Multiply the radical expressions and simplify the answer

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

- | | | | |
|---|--------------------------|---|--------------------------|
| a | $3\sqrt{65} + \sqrt{10}$ | b | $1 + \sqrt{10}$ |
| c | $4\sqrt{65} + \sqrt{10}$ | d | $\sqrt{65} + 4\sqrt{10}$ |
| e | $\sqrt{65} + 1$ | f | $\sqrt{65} + \sqrt{10}$ |