



Math worksheet on 'Algebraic Functions - Multiply Bracketed Terms, Same Variable (Level 4)'. Part of a broader unit on 'Polynomials and Quadratics - Intro'

Learn online: [app.mobius.academy/math/units/polynomials\\_and\\_quadratics\\_intro/](http://app.mobius.academy/math/units/polynomials_and_quadratics_intro/)

2 Which answer is the same expression as this

$$(2r - 9)(4r - 9)$$

- |                             |                            |
|-----------------------------|----------------------------|
| <b>a</b> $54r^2 + 81r - 54$ | <b>b</b> $8r^2 - 54r + 81$ |
| <b>c</b> $54r^2 - 81r + 54$ | <b>d</b> $8r^2 + 54r - 81$ |
| <b>e</b> $8r^2 + 54r + 81$  | <b>f</b> $8r^2 + 81r + 54$ |

4 Which answer is the same expression as this

$$(5x - 5)(7x - 5)$$

- |                             |                             |
|-----------------------------|-----------------------------|
| <b>a</b> $35x^2 + 60x + 25$ | <b>b</b> $35x^2 + 60x - 25$ |
| <b>c</b> $35x^2 + 25x + 60$ | <b>d</b> $60x^2 - 25x + 60$ |
| <b>e</b> $60x^2 + 25x - 60$ | <b>f</b> $35x^2 - 60x + 25$ |

6 Which answer is the same expression as this

$$(7r - 2)(6r + 3)$$

- |                            |                            |
|----------------------------|----------------------------|
| <b>a</b> $42r^2 - 42r - 6$ | <b>b</b> $6r^2 - 6r - 6$   |
| <b>c</b> $42r^2 + 9r - 6$  | <b>d</b> $42r^2 + 42r - 6$ |
| <b>e</b> $42r^2 + 42r - 6$ | <b>f</b> $6r^2 + 42r + 6$  |

1 Which answer is the same expression as this

$$(2y - 2)(3y - 5)$$

- |                            |                             |
|----------------------------|-----------------------------|
| <b>a</b> $6y^2 + 16y - 10$ | <b>b</b> $6y^2 + 10y + 16$  |
| <b>c</b> $6y^2 - 16y + 10$ | <b>d</b> $16y^2 + 10y - 16$ |
| <b>e</b> $6y^2 + 16y + 10$ | <b>f</b> $16y^2 - 10y + 16$ |

3 Which answer is the same expression as this

$$(9r - 8)(6r - 6)$$

- |                              |                               |
|------------------------------|-------------------------------|
| <b>a</b> $54r^2 - 102r + 48$ | <b>b</b> $102r^2 - 48r + 102$ |
| <b>c</b> $54r^2 + 102r - 48$ | <b>d</b> $54r^2 + 48r + 102$  |
| <b>e</b> $54r^2 + 102r + 48$ | <b>f</b> $102r^2 + 48r - 102$ |

5 Which answer is the same expression as this

$$(7r - 6)(9r - 7)$$

- |                               |                              |
|-------------------------------|------------------------------|
| <b>a</b> $103r^2 - 42r + 103$ | <b>b</b> $63r^2 - 103r + 42$ |
| <b>c</b> $103r^2 + 42r - 103$ | <b>d</b> $63r^2 + 103r + 42$ |
| <b>e</b> $63r^2 + 42r + 103$  | <b>f</b> $63r^2 + 103r - 42$ |

7 Which answer is the same expression as this

$$(8z - 6)(2z + 3)$$

- |                             |                             |
|-----------------------------|-----------------------------|
| <b>a</b> $16z^2 + 16z - 18$ | <b>b</b> $16z^2 - 16z - 18$ |
| <b>c</b> $16z^2 + 16z - 18$ | <b>d</b> $18z^2 - 18z - 18$ |
| <b>e</b> $18z^2 + 16z + 18$ | <b>f</b> $16z^2 + 12z - 18$ |