

**Recognize equivalent algebraic expressions****1**

2×18

- | | |
|---|------------------------------------|
| A $(2 + 8) + (10 \times 8)$ | B $(2 \times 10) + (2 \times 8)$ |
| C $(2 \times 8) + (10 \times 8) + (8 \times 8)$ | D $(2 \times 19) + (10 \times 24)$ |
| E $(2 \times 23) + (10 \times 24)$ | F $(2 \times 12) + (10 \times 12)$ |

2

Find a composite multiplication that is the same as the factored multiplication

$2 \times 2 \times 3 \times 2 \times 7 \times 7$

- | | |
|-------------------|-------------------|
| A 12×100 | B 10×101 |
| C 9×98 | D 12×98 |
| E 10×99 | F 15×102 |

3

Which answer is the same expression as this

$(x + 5)(3x + 2)$

- | | |
|---------------------|---------------------|
| A $10x^2 - 17x + 9$ | B $2x^2 + 10x - 17$ |
| C $3x^2 + 17x + 10$ | D $x^2 - 17x + 10$ |
| E $3x^2 + 10x + 17$ | F $x^2 + 17x - 10$ |

4

Which answer is the same expression as this

$3(x - 6)$

- | | |
|--------------|-------------|
| A $3x + 9$ | B $3x - 18$ |
| C $x^3 + 18$ | D $3x - 9$ |
| E $3x + 18$ | |

5

Which answer is the same expression as this

$zt + 5t - 9z - 45$

- | | |
|--------------------|---------------------|
| A $(z - 5)(t + 9)$ | B $(z + 45)(t - 9)$ |
| C $(z - 5)(t + 4)$ | D $(z + 5)(t + 9)$ |
| E $(z + 5)(t - 9)$ | |

6

Which answer is the same expression as this

$m(x - 8)$

- | | |
|--------------|--------------|
| A $mx - 8$ | B $m^2 - 8m$ |
| C $m^2 + 8m$ | D $mx - 8m$ |
| E $mx + 8m$ | F $mx + 8$ |

7

Which answer is the same expression as this

$m(2m - 2)$

- | | |
|---------------|---------------|
| A $2m^2 - 4m$ | B $m + 2$ |
| C $2m^2 + 2m$ | D $2m^2 - 2m$ |
| E $2m^2 + 2m$ | F $m^2 + 2m$ |

8

Which answer is the same expression as this

$(m - 4)(r - 4)$

- | |
|-----------------------|
| A $mr + 4r - 4m + 16$ |
| B $mr - 4r - 4m + 16$ |

**Recognize equivalent algebraic expressions****9**

Which answer is the same expression as this
 $10x - 4$

A $2(x + 2)$

B $2(x + 4)$

C $2(2x - 10)$

D $2(2x + 2)$

E $2(5x - 2)$

10

Which answer is the same expression as this
 $(m + 3)(m + 7)$

A $m^2 + 10m + 21$

B $-4m^2 + 10m + 21$

11

Which answer is the same expression as this
 $(4m - 8)(q - 9)$

A $4mq + 8q - 36m + 72$

B $mq + 9q - 8m - 72$

C $8mq + 8q - 9m + 36$

D $mq - 8q - 9m - 72$

E $8mq + 8q + 9m + 72$

F $9mq + 8q + 9m + 72$

12

Which answer is the same expression as this
 $qn - 8q$

A $q(n - 8)$

B $8q(n + 8)$

13

Which answer is the same expression as this
 $m^2 + 3m$

A $m(m - 3)$

B $m(m + 3)$

14

Which answer is the same expression as this
 $4yn + 36n + 3y + 27$

A $(y + 6)(9n + 36)$

B $(y + 9)(4n + 3)$

15

Which answer is the same expression as this
 $q^2 - 9$

A $(q - 4)(q + 3)$

B $(q + 3)(q - 3)$

C $(q + 2)(q - 4)$

D $(6q - 3)(q + 3)$

E $(9q - 3)(q + 3)$