



## Use properties to generate equivalent expressions

**1**

$2 \times 8 \times 7$

A  $20 \times 7$

B  $2 \times 56$

C  $13 \times 7$

D  $11 \times 20$

E  $10 \times 7$

F  $12 \times 7$

**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  $10 \times 99$

B  $10 \times 101$

C  $9 \times 98$

D  $12 \times 98$

E  $12 \times 100$

F  $15 \times 102$

**3**

$2 \times 18$

A  $(2 \times 19) + (10 \times 24)$

B  $(2 \times 12) + (10 \times 12)$

C  $(2 \times 23) + (10 \times 24)$

D  $(2 \times 8) + (10 \times 8) + (8 \times 8)$

E  $(2 \times 10) + (2 \times 8)$

F  $(2 + 8) + (10 \times 8)$

**4**

$(5 \times 10) + (5 \times 7)$

A  $11 \times 9$

B  $12 \times 11$

C  $11 \times 15$

D  $10 \times 21$

E  $5 \times 22$

F  $5 \times 17$

**5**

Which answer is the same expression as this

$(t + 8)(x - 6)$

A  $tx + 6x - 8t - 48$

B  $tx + 8x - 6t - 48$

**6**

Which answer is the same expression as this

$(m + 9)(m - 6)$

A  $m^2 + 3m - 54$

B  $3m^2 + 3m - 54$

**7**

Which answer is the same expression as this

$pr - 3p$

A  $p(r - 3)$

B  $3(p - r)$

**8**

Which answer is the same expression as this

$m^2 + 6m$

A  $m^2(m + 6)$

B  $m(m + 6)$



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**9**

Which answer is the same expression as this

$$4(8c - 2)$$

|   |           |   |            |
|---|-----------|---|------------|
| A | $32c + 8$ | B | $32c - 8$  |
| C | $4c - 32$ | D | $c^4 + 8$  |
| E | $4c + 8$  | F | $32c + 32$ |

**10**

Which answer is the same expression as this

$$y(6z + 3)$$

|   |            |   |             |
|---|------------|---|-------------|
| A | $6yz - 3$  | B | $yz + 6y$   |
| C | $6yz + 3y$ | D | $3yz + 3$   |
| E | $6yz - 3y$ | F | $3y^2 + 3y$ |

**11**

Which answer is the same expression as this

$$x(2 - 3x)$$

|   |             |   |             |
|---|-------------|---|-------------|
| A | $2x - 3x^2$ | B | $5x - 2x^2$ |
| C | $2x - x^2$  | D | $2x + 2x^2$ |
| E | $x^2 + 2x$  | F | $x + 2$     |

**12**

Which answer is the same expression as this

$$6z + 4$$

|   |            |   |             |
|---|------------|---|-------------|
| A | $2(z + 6)$ | B | $(z^2 + 4)$ |
| C | $2(z + 4)$ | D | $2(3z + 2)$ |
| E | $2(z - 2)$ |   |             |

**13**

Which answer is the same expression as this

$$(p + 5)(8p + 6)$$

|   |                   |   |                   |
|---|-------------------|---|-------------------|
| A | $8p^2 - 46p + 30$ | B | $8p^2 + 30p + 46$ |
| C | $p^2 - 30p + 46$  | D | $p^2 + 30p - 46$  |
| E | $8p^2 + 46p + 30$ | F | $46p^2 + p + 30$  |