



Multiply polynomial functions

1

How can you multiply 23 by 29 by breaking 29 apart

$$\begin{array}{r} 23 \\ \times 29 \\ \hline \end{array}$$

A $(23 \times 20) + (23 \times 9)$

B $(23 \times 20) + (23 \times 3)$

2

Which answer is the same expression as this

$$3(r + 8)$$

A $r^3 + 24$

B $3r - 24$

C $3r + 24$

D $3r + 11$

E $3r - 11$

3

Which answer is the same expression as this

$$(z - 8)(w + 5)$$

A $zw - 8w + 5z - 40$

B $80zw - 8w + 5z - 40$

4

Which answer is the same expression as this

$$(p - 3)(p - 5)$$

A $p^2 - 8p + 15$

B $15p^2 - 8p + 15$

5

Multiply and write the answer with like terms grouped.

$$-4x^2(6xy^2 - 7y^2 - 3y)$$

A $28x^2y^2 + 12x^2y$

B $-24xy^2 + 28y^2 + 12y$

C $24x^3y^2 + 28x^2y^2 + 12x^2y$

D $-24x^3y^2 + 28x^2y^2 + 12x^2y$

6

Multiply and write the answer with like terms grouped.

$$-7x^2(6x^3 + x - 4)$$

A $-42x^3 - 7x + 28$

B $-7x^3 + 28x^2$

C $42x^5 + 7x^3 + 28x^2$

D $-42x^5 - 7x^3 + 28x^2$



Multiply polynomial functions

7

Multiply and write the answer with like terms grouped.

$$-y^3 (7x^3y^3 - 8x^2y^2 + 4y^4)$$

A	$-7x^3y^3 + 8x^2y^2 - 4y^4$
B	$-7x^3y^6 + 8x^2y^5$
C	$7x^3y^6 + 8x^2y^5 + 4y^7$
D	$-7x^3y^6 + 8x^2y^5 - 4y^7$

8

Multiply and write the answer with like terms grouped.

$$(-8x^2y^2 - 6x^3)(2x^4y^4 + 8x^3 - 2x)$$

A	$-64x^5y^2 - 48x^6 + 16x^3y^2 + 12x^4$
B	$-28x^4y^4 - 112x^3 + 28x$
C	$16x^6y^6 + 12x^7y^4 + 64x^5y^2 + 48x^6 + 16x^3y^2 + 12x^4$
D	$-16x^6y^6 - 12x^7y^4 - 64x^5y^2 - 48x^6 + 16x^3y^2 + 12x^4$

9

Multiply and write the answer with like terms grouped.

$$(8x^2y^2 - 8x^2)(-5xy^2 + 7x - 9)$$

A	$40x^3y^4 + 96x^3y^2 + 72x^2y^2 + 56x^3 + 72x^2$
B	$-39x^3y^4 + 96x^3y^2 - 72x^2y^2 - 56x^3 + 72x^2$
C	$-40x^3y^4 + 96x^3y^2 - 72x^2y^2 - 56x^3 + 72x^2$
D	$-40x^3y^4 + 40x^3y^2 - 72x^2y^2 + 72x^2$

10

Multiply and write the answer with like terms grouped.

$$(8x^3 - 7x^2)(-x^3 - 3x^2 - 8x)$$

A	$8x^6 + 31x^5 + 85x^4 + 56x^3$
B	$-8x^6 - 17x^5 - 43x^4 + 56x^3$
C	$-x^3 - 3x^2 - 8x$
D	$-8x^6 + 7x^5 - 64x^4 + 56x^3$