Multiplication of Monomials

1 Find the product.

$$x \cdot x = \underline{\hspace{1cm}}$$

2 Find the product.

$$3x^2 \cdot 2x^3 =$$

3 Calculate the value of

$$3a^2 \cdot a^3$$

Which of the following is the correct result?

- A. $4a^5$
- B. $4a^6$
- C. 3a⁵
- D. $3a^6$



$$2x^2 \cdot 3xy =$$

$$x^3y^2\cdot \left(-2xy^3
ight)=$$

$$6a^2b\cdot(-2ab)=$$

7 Find the product.

$$(-2.4x^2y^3)(-0.5x^4) =$$

8 Calculate the value of

$$-a^2b^2\cdot(-2ab^3c)$$

Which of the following is the correct result?

A.
$$2a^3b^5c$$

B.
$$2a^3b^5$$

C.
$$-2a^3b^5c$$

D.
$$-2a^3b^5$$

9 Find the product.

$$-4a^3b^2c\cdot 3ab^3=$$

10 Find the product.

$$\frac{2}{5}x^2y^3\cdot\frac{5}{16}xyz\cdot(-2x^2y)=\underline{\hspace{1cm}}$$

Multiplication of Monomials

1 Find the product.

$$x \cdot x = \underline{\hspace{1cm}}$$

Answer x^2

Solution
$$x \cdot x = x^2$$

2 Find the product.

$$3x^2\cdot 2x^3 =$$

Answer $6x^5$

Solution
$$3x^2 \cdot 2x^3 = 6x^5$$

3 Calculate the value of

$$3a^2 \cdot a^3$$

Which of the following is the correct result?

A.
$$4a^5$$

B.
$$4a^6$$

C.
$$3a^{5}$$

D.
$$3a^6$$

Answer C

Solution
$$3a^2 \cdot a^3 = 3a^5$$

The answer is C.

4 Find the product.

$$2x^2\cdot 3xy =$$

Answer
$$6x^3y$$

Solution
$$2x^2 \cdot 3xy = 6x^3y$$

$$x^3y^2\cdot \left(-2xy^3
ight)=$$

Answer
$$-2x^4y^5$$

Solution
$$x^3y^2\cdot\left(-2xy^3
ight)=\left[1 imes(-2)
ight]\left(x^3\cdot x
ight)\left(y^2\cdot y^3
ight)=-2x^4y^5$$

$$6a^2b\cdot(-2ab)=$$

Answer
$$-12a^3b^3$$

Solution
$$6a^2b \cdot (-2ab) = -12a^3b^3$$

$$(-2.4x^2y^3)(-0.5x^4) =$$

Answer
$$1.2x^6y^3$$

Alternative:
$$\frac{6}{5}x^6y^3$$

Solution
$$(-2.4x^2y^3)(-0.5x^4)=1.2x^6y^3$$

8 Calculate the value of

$$-a^2b^2\cdot(-2ab^3c)$$

Which of the following is the correct result?

A
$$2a^3b^5c$$

B.
$$2a^3b^5$$

C.
$$-2a^3b^5c$$

D.
$$-2a^3b^5$$

Answer A

Solution
$$-a^2b^2\cdot(-2ab^3c)=2a^3b^5c$$

The answer is A.

9 Find the product.

$$-4a^3b^2c\cdot 3ab^3=$$

Answer
$$-12a^4b^5c$$

Solution
$$-4a^3b^2c\cdot 3ab^3 = -12a^4b^5c$$

10 Find the product.

$$rac{2}{5}x^2y^3\cdotrac{5}{16}xyz\cdot(-2x^2y)=$$

Answer
$$-\frac{1}{4}x^5y^5z$$

Alternative: $-0.25x^5y^5z$

Solution
$$rac{2}{5}x^2y^3\cdotrac{5}{16}xyz\cdot(-2x^2y)=-rac{1}{4}x^5y^5z$$