

# Multiplying Exponents (A)

Simplify each expression.

1.  $6^7 \cdot 6^8$

2.  $3^1 \cdot 3^8$

3.  $8^9 \cdot 8^9$

4.  $8^5 \cdot 8^6$

5.  $3^7 \cdot 3^2$

6.  $5^3 \cdot 5^6$

7.  $3^9 \cdot 3^7$

8.  $5^0 \cdot 5^0$

9.  $3^5 \cdot 3^8$

10.  $3^1 \cdot 3^8$

# Multiplying Exponents (A) Answers

Simplify each expression.

1.  $6^7 \cdot 6^8$

$$= 6^{15}$$

2.  $3^1 \cdot 3^8$

$$= 3^9$$

3.  $8^9 \cdot 8^9$

$$= 8^{18}$$

4.  $8^5 \cdot 8^6$

$$= 8^{11}$$

5.  $3^7 \cdot 3^2$

$$= 3^9$$

6.  $5^3 \cdot 5^6$

$$= 5^9$$

7.  $3^9 \cdot 3^7$

$$= 3^{16}$$

8.  $5^0 \cdot 5^0$

$$= 5^0 = 1$$

9.  $3^5 \cdot 3^8$

$$= 3^{13}$$

10.  $3^1 \cdot 3^8$

$$= 3^9$$

## Multiplying Exponents (B)

Simplify each expression.

1.  $9^7 \cdot 9^0$

2.  $8^9 \cdot 8^0$

3.  $5^1 \cdot 5^2$

4.  $5^0 \cdot 5^7$

5.  $8^4 \cdot 8^5$

6.  $5^8 \cdot 5^8$

7.  $5^2 \cdot 5^2$

8.  $4^5 \cdot 4^2$

9.  $6^8 \cdot 6^9$

10.  $5^7 \cdot 5^6$

## Multiplying Exponents (B) Answers

Simplify each expression.

1.  $9^7 \cdot 9^0$

$$= 9^7$$

2.  $8^9 \cdot 8^0$

$$= 8^9$$

3.  $5^1 \cdot 5^2$

$$= 5^3$$

4.  $5^0 \cdot 5^7$

$$= 5^7$$

5.  $8^4 \cdot 8^5$

$$= 8^9$$

6.  $5^8 \cdot 5^8$

$$= 5^{16}$$

7.  $5^2 \cdot 5^2$

$$= 5^4$$

8.  $4^5 \cdot 4^2$

$$= 4^7$$

9.  $6^8 \cdot 6^9$

$$= 6^{17}$$

10.  $5^7 \cdot 5^6$

$$= 5^{13}$$

## Multiplying Exponents (C)

Simplify each expression.

1.  $4^5 \cdot 4^7$

2.  $2^7 \cdot 2^2$

3.  $5^1 \cdot 5^1$

4.  $4^8 \cdot 4^6$

5.  $7^0 \cdot 7^4$

6.  $9^2 \cdot 9^9$

7.  $6^1 \cdot 6^1$

8.  $7^5 \cdot 7^3$

9.  $5^7 \cdot 5^5$

10.  $4^3 \cdot 4^3$

## Multiplying Exponents (C) Answers

Simplify each expression.

1.  $4^5 \cdot 4^7$

$$= 4^{12}$$

2.  $2^7 \cdot 2^2$

$$= 2^9$$

3.  $5^1 \cdot 5^1$

$$= 5^2$$

4.  $4^8 \cdot 4^6$

$$= 4^{14}$$

5.  $7^0 \cdot 7^4$

$$= 7^4$$

6.  $9^2 \cdot 9^9$

$$= 9^{11}$$

7.  $6^1 \cdot 6^1$

$$= 6^2$$

8.  $7^5 \cdot 7^3$

$$= 7^8$$

9.  $5^7 \cdot 5^5$

$$= 5^{12}$$

10.  $4^3 \cdot 4^3$

$$= 4^6$$

## Multiplying Exponents (D)

Simplify each expression.

1.  $6^1 \cdot 6^0$

2.  $7^7 \cdot 7^0$

3.  $8^9 \cdot 8^6$

4.  $4^7 \cdot 4^6$

5.  $2^8 \cdot 2^0$

6.  $3^3 \cdot 3^5$

7.  $3^7 \cdot 3^4$

8.  $8^9 \cdot 8^0$

9.  $2^4 \cdot 2^7$

10.  $7^4 \cdot 7^7$

## Multiplying Exponents (D) Answers

Simplify each expression.

1.  $6^1 \cdot 6^0$

$$= 6$$

2.  $7^7 \cdot 7^0$

$$= 7^7$$

3.  $8^9 \cdot 8^6$

$$= 8^{15}$$

4.  $4^7 \cdot 4^6$

$$= 4^{13}$$

5.  $2^8 \cdot 2^0$

$$= 2^8$$

6.  $3^3 \cdot 3^5$

$$= 3^8$$

7.  $3^7 \cdot 3^4$

$$= 3^{11}$$

8.  $8^9 \cdot 8^0$

$$= 8^9$$

9.  $2^4 \cdot 2^7$

$$= 2^{11}$$

10.  $7^4 \cdot 7^7$

$$= 7^{11}$$



## Multiplying Exponents (E)

Simplify each expression.

1.  $7^1 \cdot 7^2$

2.  $3^5 \cdot 3^6$

3.  $5^3 \cdot 5^9$

4.  $2^3 \cdot 2^2$

5.  $5^0 \cdot 5^6$

6.  $2^5 \cdot 2^6$

7.  $8^6 \cdot 8^9$

8.  $6^3 \cdot 6^6$

9.  $9^3 \cdot 9^0$

10.  $9^6 \cdot 9^2$

# Multiplying Exponents (E) Answers

Simplify each expression.

1.  $7^1 \cdot 7^2$

$$= 7^3$$

2.  $3^5 \cdot 3^6$

$$= 3^{11}$$

3.  $5^3 \cdot 5^9$

$$= 5^{12}$$

4.  $2^3 \cdot 2^2$

$$= 2^5$$

5.  $5^0 \cdot 5^6$

$$= 5^6$$

6.  $2^5 \cdot 2^6$

$$= 2^{11}$$

7.  $8^6 \cdot 8^9$

$$= 8^{15}$$

8.  $6^3 \cdot 6^6$

$$= 6^9$$

9.  $9^3 \cdot 9^0$

$$= 9^3$$

10.  $9^6 \cdot 9^2$

$$= 9^8$$

## Multiplying Exponents (F)

Simplify each expression.

1.  $2^5 \cdot 2^3$

2.  $9^1 \cdot 9^8$

3.  $3^7 \cdot 3^9$

4.  $4^1 \cdot 4^9$

5.  $5^9 \cdot 5^3$

6.  $4^3 \cdot 4^3$

7.  $8^8 \cdot 8^4$

8.  $6^0 \cdot 6^9$

9.  $7^8 \cdot 7^4$

10.  $9^1 \cdot 9^1$

# Multiplying Exponents (F) Answers

Simplify each expression.

1.  $2^5 \cdot 2^3$

$$= 2^8$$

2.  $9^1 \cdot 9^8$

$$= 9^9$$

3.  $3^7 \cdot 3^9$

$$= 3^{16}$$

4.  $4^1 \cdot 4^9$

$$= 4^{10}$$

5.  $5^9 \cdot 5^3$

$$= 5^{12}$$

6.  $4^3 \cdot 4^3$

$$= 4^6$$

7.  $8^8 \cdot 8^4$

$$= 8^{12}$$

8.  $6^0 \cdot 6^9$

$$= 6^9$$

9.  $7^8 \cdot 7^4$

$$= 7^{12}$$

10.  $9^1 \cdot 9^1$

$$= 9^2$$

# Multiplying Exponents (G)

Simplify each expression.

1.  $3^3 \cdot 3^0$

2.  $5^9 \cdot 5^5$

3.  $4^7 \cdot 4^6$

4.  $6^0 \cdot 6^6$

5.  $9^5 \cdot 9^7$

6.  $7^1 \cdot 7^4$

7.  $5^3 \cdot 5^1$

8.  $3^3 \cdot 3^9$

9.  $2^1 \cdot 2^4$

10.  $9^0 \cdot 9^4$

# Multiplying Exponents (G) Answers

Simplify each expression.

1.  $3^3 \cdot 3^0$

$$= 3^3$$

2.  $5^9 \cdot 5^5$

$$= 5^{14}$$

3.  $4^7 \cdot 4^6$

$$= 4^{13}$$

4.  $6^0 \cdot 6^6$

$$= 6^6$$

5.  $9^5 \cdot 9^7$

$$= 9^{12}$$

6.  $7^1 \cdot 7^4$

$$= 7^5$$

7.  $5^3 \cdot 5^1$

$$= 5^4$$

8.  $3^3 \cdot 3^9$

$$= 3^{12}$$

9.  $2^1 \cdot 2^4$

$$= 2^5$$

10.  $9^0 \cdot 9^4$

$$= 9^4$$

# Multiplying Exponents (H)

Simplify each expression.

1.  $9^1 \cdot 9^7$

2.  $9^5 \cdot 9^6$

3.  $2^4 \cdot 2^2$

4.  $2^8 \cdot 2^4$

5.  $7^4 \cdot 7^2$

6.  $7^5 \cdot 7^5$

7.  $3^6 \cdot 3^6$

8.  $8^6 \cdot 8^0$

9.  $8^2 \cdot 8^9$

10.  $5^6 \cdot 5^6$

# Multiplying Exponents (H) Answers

Simplify each expression.

1.  $9^1 \cdot 9^7$

$$= 9^8$$

2.  $9^5 \cdot 9^6$

$$= 9^{11}$$

3.  $2^4 \cdot 2^2$

$$= 2^6$$

4.  $2^8 \cdot 2^4$

$$= 2^{12}$$

5.  $7^4 \cdot 7^2$

$$= 7^6$$

6.  $7^5 \cdot 7^5$

$$= 7^{10}$$

7.  $3^6 \cdot 3^6$

$$= 3^{12}$$

8.  $8^6 \cdot 8^0$

$$= 8^6$$

9.  $8^2 \cdot 8^9$

$$= 8^{11}$$

10.  $5^6 \cdot 5^6$

$$= 5^{12}$$



# Multiplying Exponents (I)

Simplify each expression.

1.  $4^0 \cdot 4^8$

2.  $3^6 \cdot 3^1$

3.  $3^9 \cdot 3^9$

4.  $8^6 \cdot 8^6$

5.  $9^1 \cdot 9^6$

6.  $4^2 \cdot 4^8$

7.  $4^6 \cdot 4^8$

8.  $3^2 \cdot 3^3$

9.  $3^9 \cdot 3^8$

10.  $3^7 \cdot 3^2$

# Multiplying Exponents (I) Answers

Simplify each expression.

1.  $4^0 \cdot 4^8$

$$= 4^8$$

2.  $3^6 \cdot 3^1$

$$= 3^7$$

3.  $3^9 \cdot 3^9$

$$= 3^{18}$$

4.  $8^6 \cdot 8^6$

$$= 8^{12}$$

5.  $9^1 \cdot 9^6$

$$= 9^7$$

6.  $4^2 \cdot 4^8$

$$= 4^{10}$$

7.  $4^6 \cdot 4^8$

$$= 4^{14}$$

8.  $3^2 \cdot 3^3$

$$= 3^5$$

9.  $3^9 \cdot 3^8$

$$= 3^{17}$$

10.  $3^7 \cdot 3^2$

$$= 3^9$$

# Multiplying Exponents (J)

Simplify each expression.

1.  $6^3 \cdot 6^6$

2.  $6^1 \cdot 6^6$

3.  $9^5 \cdot 9^3$

4.  $9^5 \cdot 9^2$

5.  $6^9 \cdot 6^9$

6.  $9^3 \cdot 9^3$

7.  $8^1 \cdot 8^9$

8.  $4^8 \cdot 4^3$

9.  $7^3 \cdot 7^7$

10.  $9^1 \cdot 9^0$

## Multiplying Exponents (J) Answers

Simplify each expression.

1.  $6^3 \cdot 6^6$

$$= 6^9$$

2.  $6^1 \cdot 6^6$

$$= 6^7$$

3.  $9^5 \cdot 9^3$

$$= 9^8$$

4.  $9^5 \cdot 9^2$

$$= 9^7$$

5.  $6^9 \cdot 6^9$

$$= 6^{18}$$

6.  $9^3 \cdot 9^3$

$$= 9^6$$

7.  $8^1 \cdot 8^9$

$$= 8^{10}$$

8.  $4^8 \cdot 4^3$

$$= 4^{11}$$

9.  $7^3 \cdot 7^7$

$$= 7^{10}$$

10.  $9^1 \cdot 9^0$

$$= 9$$