



Practice exercise: Exponents

Subtopics: Rules of Exponents

1. Identify the base and exponent in the expression y^5

- A) Base: 5, exponent: 5y
- B) Base: 5y, exponent: 5
- C) Base: y, exponent: 5
- D) Base: 5, exponent: y

2. Simplify $(y + 3)^8 (y + 3)^4$

- A) $(y + 3)^{32}$
- B) $y^{12} + 3^{12}$
- C) $2(y + 3)^{12}$
- D) $(y + 3)^{12}$

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

- A) 8^{432}
- B) 512^{432}
- C) 8^{23}
- D) 512^{23}

4. $(8x^4)(7x^2)$

- A) $15x^8$
- B) $56x^8$
- C) $56x^6$
- D) $15x^6$

5. $\frac{16m^3n^2}{2m^{10}n}$

- A) $\frac{8n}{m^7}$
- B) $8m^7n^2$
- C) $\frac{8m^7}{n}$
- D) $8mn$

6. $-(15^0) + (-7)^0$

- A) 0
- B) 4
- C) 1
- D) -2

7. $(-3)^0 - (-2)^1$

- A) 3
- B) -2
- C) 2
- D) -1

8. $(-3a^2)^3$

- A) $(-3)^3a^6$
- B) $(-3)^6a^2$
- C) $(-3)^6a^6$
- D) $-9a^2$

9. $(2/x)^4$

- A) $16/x$
- B) $16x^4$
- C) $16/x^4$
- D) $2/x^4$

10. $(2/3g)^3$

- A) $2/3g^3$
- B) $8/3g$
- C) $8/3g^3$
- D) $8/27g^3$

Answer Key

Practice exercise: Exponents

Subtopics: Rules of Exponents

1. C

2. D

3. C

4. C

5. A

6. A

7. A

8. A

9. C

10. D