

Study Guide

1. Simplify $(x^9)^0 \cdot (x^7)^2$

- A x^{14}
- B 1
- C x^{126}

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

- A $8 \cdot x^{(4 \cdot 2)}$
- B $8^{(1 \cdot 2)} \cdot x^{(4 \cdot 2)}$
- C $8^{(1+2)} \cdot x^{(4+2)}$

3. Which one doesn't work
 $3 \times 3 \times 3 \times 3 \times 3 \times 3$

- A 9^3
- B $3^3 \times 3^2$
- C $3^1 \times 3^5$

7. two answer: $\sqrt{196}$

- A -14
- B 14
- C 13

8. solve $\sqrt{289^2}$

- A 289
- B -289
- C -17

9. $1.0315 \times 10^4 =$

- A 0.000000 10315
- B 103,150
- C 1,031,500

4. Simplify $\frac{3c^8}{12c^{12}}$

- A $4c^4$
- B $\frac{4}{c^4}$
- C $\frac{1}{4c^4}$

5. solve $y^2 = \frac{16}{64}$

- A $\frac{3}{8}$
- B $\frac{256}{4096}$
- C $\frac{1}{2}$

6. Find h! $h^3 = 8$

- A 2
- B 4
- C 6

10. 7.0525×10^5

- A 7052.5
- B 705.25
- C 70525

11. 0.0000891 =

- A 8.91×10^{-5}
- B 8.91×10^5
- C 891×10^{-5}

12. Put in order from greatest to least

- 6.9×10^{12}
- 2.7×10^{18}
- 2.2×10^{12}
- 4.9×10^{12}

13. $9.884 \times 10^6 - 1.009 \times 10^7$

14. $(7.006 \times 10^{41}) \times (5.09 \times 10^{22})$

$$15. (5.15 \times 10^6) \div (7.44 \times 10^8)$$

$$16. \frac{(4.8 \times 10^3)}{(1.2 \times 10^4)} \times (2.2 \times 10^{-6})$$

Answers

$$1 \quad X^{14}$$

$$2 \quad 8^{(0.2)} \cdot X^{(1.2)}$$

$$3 \quad 3^3 \times 3^2$$

$$4 \quad \frac{1}{4} x^4$$

$$5 \quad \frac{1}{2}$$

$$6 \quad 2$$

$$7 \quad -14 + 14$$

$$8 \quad 289$$

$$9 \quad 1,031,500$$

$$10 \quad 7,052.5$$

$$11 \quad 8.91 \times 10^{-5}$$

$$2.2 \times 10^6$$

$$5.9 \times 10^7$$

$$2.1 \times 10^8$$

$$4.9 \times 10^2$$

$$2.06 \times 10^5$$

$$3.566 \times 10^{64}$$

$$6.922 \times 10^{-3}$$

$$16. \quad 0.088$$