

## Chapter 4: Exponents

Write the expression using an exponent.

1.  $5 \cdot 5 \cdot 5 \cdot 5$  = \_\_\_\_\_      11.  $9 \cdot 9 \cdot 9 \cdot 9 \cdot 9 \cdot 9$  = \_\_\_\_\_

2.  $2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2$  = \_\_\_\_\_      12.  $18 \cdot 18 \cdot 18 \cdot 18$  = \_\_\_\_\_

3.  $1 \cdot 1 \cdot 1 \cdot 1 \cdot 1 \cdot 1 \cdot 1 \cdot 1$  = \_\_\_\_\_      13.  $125 \cdot 125 \cdot 125$  = \_\_\_\_\_

4.  $20 \cdot 20 \cdot 20$  = \_\_\_\_\_      14.  $87 \cdot 87 \cdot 87 \cdot 87$  = \_\_\_\_\_

5.  $1000 \cdot 1000$  = \_\_\_\_\_      15.  $64 \cdot 64$  = \_\_\_\_\_

6.  $45 \cdot 45 \cdot 45$  = \_\_\_\_\_      16.  $89 \cdot 89 \cdot 89$  = \_\_\_\_\_

7.  $90 \cdot 90 \cdot 90 \cdot 90$  = \_\_\_\_\_      17.  $6 \cdot 6 \cdot 6 \cdot 6 \cdot 6 \cdot 6 \cdot 6$  = \_\_\_\_\_

8.  $53 \cdot 53 \cdot 53 \cdot 53$  = \_\_\_\_\_      18.  $10 \cdot 10 \cdot 10 \cdot 10$  = \_\_\_\_\_

9.  $5 \cdot 5 \cdot 5 \cdot 5 \cdot 5 \cdot 5$  = \_\_\_\_\_      19.  $99 \cdot 99 \cdot 99 \cdot 99$  = \_\_\_\_\_

10.  $99 \cdot 99 \cdot 99$  = \_\_\_\_\_      20.  $46 \cdot 46 \cdot 46$  = \_\_\_\_\_

1.  $89^5 =$  \_\_\_\_\_

11.  $46^3 =$  \_\_\_\_\_

2.  $64^4 =$  \_\_\_\_\_

12.  $48^5 =$  \_\_\_\_\_

3.  $22^5 =$  \_\_\_\_\_

13.  $22^4 =$  \_\_\_\_\_

4.  $99^2 =$  \_\_\_\_\_

14.  $12^4 =$  \_\_\_\_\_

5.  $10^4 =$  \_\_\_\_\_

15.  $31^3 =$  \_\_\_\_\_

6.  $69^5 =$  \_\_\_\_\_

16.  $23^3 =$  \_\_\_\_\_

7.  $87^3 =$  \_\_\_\_\_

17.  $70^5 =$  \_\_\_\_\_

8.  $8^5 =$  \_\_\_\_\_

18.  $30^5 =$  \_\_\_\_\_

9.  $12^2 =$  \_\_\_\_\_

19.  $40^4 =$  \_\_\_\_\_

10.  $56^2 =$  \_\_\_\_\_

20.  $59^5 =$  \_\_\_\_\_

Find the missing exponent.

1.  $44^{\square} = 85184$

11.  $64^{\square} = 262144$

2.  $55^{\square} = 3025$

12.  $89^{\square} = 7921$

3.  $22^{\square} = 234256$

13.  $32^{\square} = 1048576$

4.  $11^{\square} = 161051$

14.  $100^{\square} = 10000$

5.  $55^{\square} = 166375$

15.  $123^{\square} = 15129$

6.  $66^{\square} = 4356$

16.  $45^{\square} = 4100625$

7.  $88^{\square} = 681472$

17.  $90^{\square} = 729000$

8.  $7^{\square} = 2401$

18.  $35^{\square} = 42875$

9.  $34^{\square} = 39304$

19.  $75^{\square} = 31640625$

10.  $77^{\square} = 5929$

20.  $37^{\square} = 69343957$

Write your answer as a fraction or whole number.

1.  $(0.5)^4 =$  \_\_\_\_\_ 11.  $(\frac{2}{3})^3 =$  \_\_\_\_\_

2.  $(0.9)^4 =$  \_\_\_\_\_ 12.  $(\frac{4}{5})^5 =$  \_\_\_\_\_

3.  $(1.57)^3 =$  \_\_\_\_\_ 13.  $(\frac{2}{4})^4 =$  \_\_\_\_\_

4.  $(1.89)^2 =$  \_\_\_\_\_ 14.  $(\frac{4}{7})^4 =$  \_\_\_\_\_

5.  $(12.1)^4 =$  \_\_\_\_\_ 15.  $(\frac{4}{10})^3 =$  \_\_\_\_\_

6.  $(4.9)^5 =$  \_\_\_\_\_ 16.  $(\frac{1}{9})^3 =$  \_\_\_\_\_

7.  $(9.3)^3 =$  \_\_\_\_\_ 17.  $(\frac{3}{6})^5 =$  \_\_\_\_\_

8.  $(7.6)^5 =$  \_\_\_\_\_ 18.  $(\frac{9}{9})^0 =$  \_\_\_\_\_

9.  $(5.1)^2 =$  \_\_\_\_\_ 19.  $(\frac{4}{8})^4 =$  \_\_\_\_\_

10.  $(6.9)^2 =$  \_\_\_\_\_ 20.  $(\frac{6}{7})^5 =$  \_\_\_\_\_