



Examining Powers and Bases

Name: _____

Solve each problem.

1) Which equation has both 4 and -4 as a possible value of x ?

A. $x^3 = 64$
B. $x^2 = 16$
C. $x^2 = 64$
D. $x^3 = 8$

2) Which equation has both 9 and -9 as a possible value of x ?

A. $x^3 = 81$
B. $x^3 = 729$
C. $x^2 = 81$
D. $x^2 = 18$

3) Which equation has only 4 as a possible value of x ?

A. $x^3 = 12$
B. $x^3 = 64$
C. $x^2 = 64$
D. $x^3 = 16$

4) Which equation has only 7 as a possible value of x ?

A. $x^3 = 21$
B. $x^3 = 49$
C. $x^2 = 21$
D. $x^3 = 343$

5) Which equation has only 10 as a possible value of x ?

A. $x^3 = 1000$
B. $x^3 = 30$
C. $x^2 = 100$
D. $x^2 = 1000$

6) Which equation has only 6 as a possible value of x ?

A. $x^2 = 36$
B. $x^2 = 18$
C. $x^3 = 216$
D. $x^3 = 36$

7) Which equation has only 9 as a possible value of x ?

A. $x^3 = 81$
B. $x^3 = 27$
C. $x^2 = 81$
D. $x^3 = 729$

8) Which equation has both 10 and -10 as a possible value of x ?

A. $x^2 = 1000$
B. $x^3 = 1000$
C. $x^3 = 100$
D. $x^2 = 100$

9) Which equation has both 8 and -8 as a possible value of x ?

A. $x^2 = 64$
B. $x^3 = 64$
C. $x^2 = 16$
D. $x^2 = 512$

10) Which equation has only 8 as a possible value of x ?

A. $x^3 = 24$
B. $x^3 = 64$
C. $x^2 = 64$
D. $x^3 = 512$

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____



Examining Powers and Bases

Name: **Answer Key**

Solve each problem.

1) Which equation has both 4 and -4 as a possible value of x ?
A. $x^3 = 64$
B. $x^2 = 16$
C. $x^2 = 64$
D. $x^3 = 8$

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A. $x^3 = 81$
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A. $x^3 = 12$
B. $x^3 = 64$
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A. $x^3 = 21$
B. $x^3 = 49$
C. $x^2 = 21$
D. $x^3 = 343$

5) Which equation has only 10 as a possible value of x ?
A. $x^3 = 1000$
B. $x^3 = 30$
C. $x^2 = 100$
D. $x^2 = 1000$

6) Which equation has only 6 as a possible value of x ?
A. $x^2 = 36$
B. $x^2 = 18$
C. $x^3 = 216$
D. $x^3 = 36$

7) Which equation has only 9 as a possible value of x ?
A. $x^3 = 81$
B. $x^3 = 27$
C. $x^2 = 81$
D. $x^3 = 729$

8) Which equation has both 10 and -10 as a possible value of x ?
A. $x^2 = 1000$
B. $x^3 = 1000$
C. $x^3 = 100$
D. $x^2 = 100$

9) Which equation has both 8 and -8 as a possible value of x ?
A. $x^2 = 64$
B. $x^3 = 64$
C. $x^2 = 16$
D. $x^2 = 512$

10) Which equation has only 8 as a possible value of x ?
A. $x^3 = 24$
B. $x^3 = 64$
C. $x^2 = 64$
D. $x^3 = 512$

Answers

1. **B**

2. **C**

3. **B**

4. **D**

5. **A**

6. **C**

7. **D**

8. **D**

9. **A**

10. **D**