



Examining Powers and Bases

Name: _____

Solve each problem.

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

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

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

A. $x^3 = 125$
B. $x^2 = 15$
C. $x^3 = 25$
D. $x^2 = 25$

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

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

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

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

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

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

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

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

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

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

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

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

9) Which equation has both 7 and -7 as a possible value of x ?

A. $x^2 = 49$
B. $x^3 = 49$
C. $x^3 = 343$
D. $x^3 = 14$

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

A. $x^3 = 1000$
B. $x^2 = 20$
C. $x^3 = 100$
D. $x^2 = 100$

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____



Examining Powers and Bases

Name: **Answer Key**

Solve each problem.

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

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

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

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

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A. $x^2 = 49$
B. $x^3 = 49$
C. $x^3 = 343$
D. $x^3 = 14$

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

A. $x^3 = 1000$
B. $x^2 = 20$
C. $x^3 = 100$
D. $x^2 = 100$

Answers

1. **B**

2. **A**

3. **B**

4. **C**

5. **D**

6. **D**

7. **A**

8. **C**

9. **A**

10. **D**