



Examining Powers and Bases

Name: _____

Solve each problem.

1) Which equation has both 6 and -6 as a possible value of x ?

A. $x^2 = 216$
B. $x^2 = 36$
C. $x^3 = 216$
D. $x^2 = 12$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

A. $x^3 = 10$
B. $x^2 = 25$
C. $x^3 = 125$
D. $x^2 = 125$

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 6 and -6 as a possible value of x ?

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C. $x^3 = 216$
D. $x^2 = 12$

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A. $x^3 = 49$
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C. $x^3 = 343$
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A. $x^3 = 216$
B. $x^2 = 216$
C. $x^3 = 18$
D. $x^2 = 36$

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

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

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

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

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

A. $x^3 = 16$
B. $x^2 = 16$
C. $x^2 = 8$
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C. $x^3 = 81$
D. $x^2 = 729$

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

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

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

A. $x^3 = 10$
B. $x^2 = 25$
C. $x^3 = 125$
D. $x^2 = 125$

Answers

1. **B**

2. **B**

3. **A**

4. **A**

5. **B**

6. **B**

7. **C**

8. **B**

9. **A**

10. **B**