Examining Powers and Bases Name:

Solve each problem.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

1-10	90	80	70	60	50	40	30	20	10	0

Examining Powers and Bases Name: **Answer Key**

Solve each problem.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Answers

1. **B**
2. **B**
3. **D**
4. **C**
5. **C**
6. **B**
7. **A**
8. **B**
9. **D**
10. **D**

1-10	90	80	70	60	50	40	30	20	10	0