Examining Powers and Bases Name:

Solve each problem.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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 9 and -9 as a possible value of x?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Answers

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

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