Examining Powers and Bases

Name:

Solve each problem.

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

A. $x^2 = 729$

B. $x^3 = 81$

C. $x^3 = 729$

D. $x^2 = 81$

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

A. $x^3 = 49$

B. $x^2 = 49$

C. $x^3 = 14$

D. $x^3 = 343$

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

A. $x^3 = 216$

B. $x^2 = 36$

C. $x^2 = 12$

D. $x^2 = 216$

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

A. $x^2 = 21$

B. $x^3 = 21$

C. $x^3 = 49$

D. $x^3 = 343$

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

A. $x^3 = 18$

B. $x^3 = 36$

C. $x^3 = 216$

D. $x^2 = 36$

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

A. $x^3 = 27$

B. $x^2 = 81$

C. $x^2 = 729$

D. $x^3 = 729$

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

A. $x^2 = 20$

B. $x^2 = 100$

C. $x^3 = 20$

D. $x^3 = 1000$

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

A. $x^3 = 10$

B. $x^2 = 125$

C. $x^2 = 25$

D. $x^3 = 125$

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

A. $x^2 = 64$

B. $x^2 = 24$

C. $x^3 = 512$

D. $x^2 = 512$

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

A. $x^2 = 512$

B. $x^2 = 64$

C. $x^3 = 16$

D. $x^2 = 16$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Answers

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

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