Examining Powers and Bases Name:

Solve each problem.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

A. $x^3 = 8$
B. $x^2 = 8$
C. $x^2 = 64$
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.

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

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

A. $x^3 = 8$
B. $x^2 = 8$
C. $x^2 = 64$
D. $x^2 = 16$

Answers

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

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