Examining Powers and Bases

Name:

Solve each problem.

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

A. $x^2 = 125$

B. $x^3 = 25$

C. $x^3 = 125$

D. $x^3 = 15$

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

A. $x^3 = 729$

B. $x^2 = 81$

C. $x^2 = 729$

D. $x^3 = 81$

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

A. $x^2 = 25$

B. $x^3 = 10$

C. $x^2 = 10$

D. $x^3 = 125$

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

A. $x^2 = 20$

B. $x^3 = 1000$

C. $x^3 = 100$

D. $x^2 = 100$

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

A. $x^3 = 216$

B. $x^3 = 18$

C. $x^2 = 36$

D. $x^2 = 216$

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

A. $x^2 = 512$

B. $x^3 = 512$

C. $x^2 = 24$

D. $x^3 = 24$

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

A. $x^3 = 27$

B. $x^3 = 729$

C. $x^3 = 81$

D. $x^2 = 81$

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

A. $x^2 = 16$

B. $x^3 = 64$

C. $x^3 = 16$

D. $x^2 = 8$

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

A. $x^3 = 512$

B. $x^2 = 16$

C. $x^2 = 512$

D. $x^2 = 64$

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

A. $x^2 = 30$

B. $x^3 = 1000$

C. $x^3 = 100$

D. $x^2 = 1000$

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 only 5 as a possible value of x?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Answers

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

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