



Examining Powers and Bases

Name: _____

Solve each problem.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____



Examining Powers and Bases

Name: **Answer Key**

Solve each problem.

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A. $x^3 = 343$
B. $x^3 = 21$
C. $x^2 = 21$
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8) Which equation has only 5 as a possible value of x ?

A. $x^2 = 125$
B. $x^3 = 15$
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9) Which equation has only 4 as a possible value of x ?

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

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

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

Answers

1. **B**

2. **A**

3. **D**

4. **D**

5. **C**

6. **A**

7. **A**

8. **C**

9. **C**

10. **B**