Solving with Negative Powers Name:

Find the positive value of x.

1) $x^3 = 1{,}000^{-1}$

2) $x^3 = 8^{-1}$

3) $x^3 = 27^{-1}$

4) $x^3 = 64^{-1}$

5) $x^3 = 125^{-1}$

6) $x^3 = 216^{-1}$

7) $x^3 = 343^{-1}$

8) $x^3 = 512^{-1}$

9) $x^3 = 729^{-1}$

10) $x^3 = 1{,}000^{-1}$

11) $x^2 = 1^{-1}$

12) $x^2 = 4^{-1}$

13) $x^2 = 9^{-1}$

14) $x^2 = 16^{-1}$

15) $x^2 = 25^{-1}$

16) $x^2 = 36^{-1}$

17) $x^2 = 49^{-1}$

18) $x^2 = 64^{-1}$

19) $x^2 = 81^{-1}$

20) $x^2 = 100^{-1}$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0

Solving with Negative Powers Name: **Answer Key**

Find the positive value of x.

1) $x^3 = 1{,}000^{-1}$

$\frac{1}{x^3} = \frac{1}{1{,}000}$

$x^3 = 1{,}000$

2) $x^3 = 8^{-1}$

$\frac{1}{x^3} = \frac{1}{8}$

$x^3 = 8$

3) $x^3 = 27^{-1}$

$\frac{1}{x^3} = \frac{1}{27}$

$x^3 = 27$

4) $x^3 = 64^{-1}$

$\frac{1}{x^3} = \frac{1}{64}$

$x^3 = 64$

5) $x^3 = 125^{-1}$

$\frac{1}{x^3} = \frac{1}{125}$

$x^3 = 125$

6) $x^3 = 216^{-1}$

$\frac{1}{x^3} = \frac{1}{216}$

$x^3 = 216$

7) $x^3 = 343^{-1}$

$\frac{1}{x^3} = \frac{1}{343}$

$x^3 = 343$

8) $x^3 = 512^{-1}$

$\frac{1}{x^3} = \frac{1}{512}$

$x^3 = 512$

9) $x^3 = 729^{-1}$

$\frac{1}{x^3} = \frac{1}{729}$

$x^3 = 729$

10) $x^3 = 1{,}000^{-1}$

$\frac{1}{x^3} = \frac{1}{1{,}000}$

$x^3 = 1{,}000$

11) $x^2 = 1^{-1}$

$\frac{1}{x^2} = \frac{1}{1}$

$x^2 = 1$

12) $x^2 = 4^{-1}$

$\frac{1}{x^2} = \frac{1}{4}$

$x^2 = 4$

13) $x^2 = 9^{-1}$

$\frac{1}{x^2} = \frac{1}{9}$

$x^2 = 9$

14) $x^2 = 16^{-1}$

$\frac{1}{x^2} = \frac{1}{16}$

$x^2 = 16$

15) $x^2 = 25^{-1}$

$\frac{1}{x^2} = \frac{1}{25}$

$x^2 = 25$

16) $x^2 = 36^{-1}$

$\frac{1}{x^2} = \frac{1}{36}$

$x^2 = 36$

17) $x^2 = 49^{-1}$

$\frac{1}{x^2} = \frac{1}{49}$

$x^2 = 49$

18) $x^2 = 64^{-1}$

$\frac{1}{x^2} = \frac{1}{64}$

$x^2 = 64$

19) $x^2 = 81^{-1}$

$\frac{1}{x^2} = \frac{1}{81}$

$x^2 = 81$

20) $x^2 = 100^{-1}$

$\frac{1}{x^2} = \frac{1}{100}$

$x^2 = 100$

Answers

1. 10
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. 8
9. 9
10. 10
11. 1
12. 2
13. 3
14. 4
15. 5
16. 6
17. 7
18. 8
19. 9
20. 10

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0