Solving with Squared and Cubed

Name:

**Find the positive value of x.**

**1)** $x^3 = 1$

**2)** $x^3 = 216$

**3)** $x^2 = 4$

**4)** $x^2 = 49$

**5)** $x^3 = 8$

**6)** $x^3 = 1{,}000$

**7)** $x^3 = 27$

**8)** $x^2 = 121$

**9)** $x^2 = 36$

**10)** $x^2 = 100$

**11)** $x^2 = 64$

**12)** $x^2 = 9$

**13)** $x^2 = 25$

**14)** $x^2 = 1$

**15)** $x^2 = 81$

**16)** $x^2 = 144$

**17)** $x^3 = 729$

**18)** $x^3 = 64$

**19)** $x^2 = 16$

**20)** $x^3 = 512$

**21)** $x^3 = 125$

**Answers**

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



| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-15 | 95 | 90 | 86 | 81 | 76 | 71 | 67 | 62 | 57 | 52 | 48 | 43 | 38 | 33 | 29 |
| 16-21 | 24 | 19 | 14 | 10 | 5 | 0 | | | | | | | | |

Solving with Squared and Cubed

Name: **Answer Key**

**Find the positive value of x.**

**1)** $x^3 = 1$

$\sqrt[3]{x^3} = \sqrt[3]{1}$

$x = \sqrt[3]{1}$

**2)** $x^3 = 216$

$\sqrt[3]{x^3} = \sqrt[3]{216}$

$x = \sqrt[3]{216}$

**3)** $x^2 = 4$

$\sqrt{x^2} = \sqrt{4}$

$x = \sqrt{4}$

**4)** $x^2 = 49$

$\sqrt{x^2} = \sqrt{49}$

$x = \sqrt{49}$

**5)** $x^3 = 8$

$\sqrt[3]{x^3} = \sqrt[3]{8}$

$x = \sqrt[3]{8}$

**6)** $x^3 = 1{,}000$

$\sqrt[3]{x^3} = \sqrt[3]{1{,}000}$

$x = \sqrt[3]{1{,}000}$

**7)** $x^3 = 27$

$\sqrt[3]{x^3} = \sqrt[3]{27}$

$x = \sqrt[3]{27}$

**8)** $x^2 = 121$

$\sqrt{x^2} = \sqrt{121}$

$x = \sqrt{121}$

**9)** $x^2 = 36$

$\sqrt{x^2} = \sqrt{36}$

$x = \sqrt{36}$

**10)** $x^2 = 100$

$\sqrt{x^2} = \sqrt{100}$

$x = \sqrt{100}$

**11)** $x^2 = 64$

$\sqrt{x^2} = \sqrt{64}$

$x = \sqrt{64}$

**12)** $x^2 = 9$

$\sqrt{x^2} = \sqrt{9}$

$x = \sqrt{9}$

**13)** $x^2 = 25$

$\sqrt{x^2} = \sqrt{25}$

$x = \sqrt{25}$

**14)** $x^2 = 1$

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

$x = \sqrt{1}$

**15)** $x^2 = 81$

$\sqrt{x^2} = \sqrt{81}$

$x = \sqrt{81}$

**16)** $x^2 = 144$

$\sqrt{x^2} = \sqrt{144}$

$x = \sqrt{144}$

**17)** $x^3 = 729$

$\sqrt[3]{x^3} = \sqrt[3]{729}$

$x = \sqrt[3]{729}$

**18)** $x^3 = 64$

$\sqrt[3]{x^3} = \sqrt[3]{64}$

$x = \sqrt[3]{64}$

**19)** $x^2 = 16$

$\sqrt{x^2} = \sqrt{16}$

$x = \sqrt{16}$

**20)** $x^3 = 512$

$\sqrt[3]{x^3} = \sqrt[3]{512}$

$x = \sqrt[3]{512}$

**21)** $x^3 = 125$

$\sqrt[3]{x^3} = \sqrt[3]{125}$

$x = \sqrt[3]{125}$

**Answers**

1. **1**
2. **6**
3. **2**
4. **7**
5. **2**
6. **10**
7. **3**
8. **11**
9. **6**
10. **10**
11. **8**
12. **3**
13. **5**
14. **1**
15. **9**
16. **12**
17. **9**
18. **4**
19. **4**
20. **8**
21. **5**



| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-15 | 95 | 90 | 86 | 81 | 76 | 71 | 67 | 62 | 57 | 52 | 48 | 43 | 38 | 33 | 29 |
| 16-21 | 24 | 19 | 14 | 10 | 5 | 0 | | | | | | | | | |