

(1-5) Solving Equations using
Cube Roots & Square Roots

① $\sqrt{x^2} = \sqrt{49}$

$x = \pm 7$

7 and -7
(Rational)

② $\sqrt{x^2} = \sqrt{48}$

$x = \pm \sqrt{48}$

(Irrational)

③ $\sqrt[3]{x^3} = \sqrt[3]{125}$

$x = 5$

(Rational)

④ $\sqrt[3]{x^3} = \sqrt[3]{-60}$

$x = \sqrt[3]{-60}$

(Irrational)

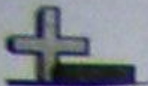
$\sqrt[3]{-64} = -4$

Perfect Squares

1^2	1
2^2	4
3^2	9
4^2	16
5^2	25
6^2	36
7^2	49
8^2	64
9^2	81
10^2	100
11^2	121
12^2	144

Perfect Cubes

1^3	1
2^3	8
3^3	27
4^3	64
5^3	125
6^3	216



[1-5]

Solving with Squared and Cubed

Name: _____

Solve; show your work. Indicate to the right if the solution is rational or irrational.

1) $x^2 = 81$

2) $x^3 = 27$

3) $x^2 = 121$

4) $x^3 = 125$

5) $x^3 = 100$

6) $x^2 = 64$

7) $x^3 = 62$

8) $x^2 = 48$

9) $x^3 = 26$

10) $x^2 = 1$

11) $x^2 = 4$

12) $x^2 = 9$

13) $x^2 = 16$

14) $x^2 = 25$

15) $x^2 = 35$

16) $x^2 = 77$

17) $x^3 = 2$

18) $x^3 = 8$

19) $x^3 = 50$

20) $x^3 = 64$

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