

DIRECTIONS: Solve each equation.

1. $a^{3/4} = 8$

$a = 16$

2. $(3x + 1)^{3/4} = 8$

$x = 5$

3. $y^{-1/2} = 6$

$y = \frac{1}{36}$

4. $(3y)^{-1/2} = 6$

$y = \frac{1}{108}$

5. $2y^{-1/2} = 10$

$y = \frac{1}{25}$

6. $(2y)^{-1/2} = 10$

$y = \frac{1}{200}$

7. $(9t)^{-2/3} = 4$

$t = \frac{1}{72}$

8. $9t^{-2/3} = 4$

$t = \frac{27}{8}$

9. $(8 - y)^{1/3} = 4$

$y = -56$

10. $(3n - 1)^{-2/3} = \frac{1}{4}$

$n = 3$

11. $(x^2 + 4)^{2/3} = 25$

$x = \pm 11$

12. $(x^2 + 9)^{1/2} = 5$

$x = \pm 4$