

Name: _____

Period: _____ Date: _____

Solving with Rational Exponents

Section I. Solve for the variable

1. $x^{\frac{1}{2}} = 7$

2. $k^{-\frac{1}{2}} = \frac{1}{5}$

3. $m^{\frac{1}{3}} = 3$

4. $b^{\frac{2}{3}} = 16$

5. $f^{-\frac{1}{3}} = 5$

6. $y^{\frac{3}{5}} = 8$

7. $p^{\frac{1}{3}} = -5$

8. $3x^{\frac{1}{4}} = 6$

9. $5h^{-\frac{3}{2}} = 40$

10. $2w^{-\frac{1}{2}} = 10$

11. $9g^{-\frac{2}{3}} = 4$

12. $(f - 1)^{\frac{1}{2}} = 3$

13. $(d - 1)^{\frac{3}{2}} = 8$

14. $(k + 4)^{\frac{4}{3}} = 81$

15. $(j + 1)^{-\frac{1}{2}} = 2$

16. $8y^{\frac{1}{3}} = 4$

17. $\frac{1}{4}m^{-\frac{1}{2}} = 6$

18. $(g - 6)^{\frac{1}{2}} = 7$