

Equations with Rational Exponents

Date _____ Period _____

Solve each equation.

1) $125 = (25x)^{\frac{3}{2}}$

2) $x^{\frac{3}{2}} + 7 = 350$

3) $7 = (v + 17)^{\frac{1}{2}}$

4) $-2n^{\frac{1}{2}} + 5 = -11$

5) $v^{\frac{1}{2}} + 3 = 9$

6) $(x - 20)^{\frac{1}{2}} = 7$

7) $518 = 6 + p^{\frac{3}{2}}$

8) $245 = 2 + n^{\frac{5}{4}}$

9) $-5n^{\frac{3}{2}} = -1715$

10) $(4v)^{\frac{5}{3}} = 32$

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Date _____ Period _____

Solve each equation.

1) $125 = (25x)^{\frac{3}{2}}$

{1}

2) $x^{\frac{3}{2}} + 7 = 350$

{49}

3) $7 = (v + 17)^{\frac{1}{2}}$

{32}

4) $-2n^{\frac{1}{2}} + 5 = -11$

{64}

5) $v^{\frac{1}{2}} + 3 = 9$

{36}

6) $(x - 20)^{\frac{1}{2}} = 7$

{69}

7) $518 = 6 + p^{\frac{3}{2}}$

{64}

8) $245 = 2 + n^{\frac{5}{4}}$

{81}

9) $-5n^{\frac{3}{2}} = -1715$

{49}

10) $(4v)^{\frac{5}{3}} = 32$

{2}