

Name:

Solving Radical Equations

Solve for the unknown variable

① $\sqrt{5x+4} = \sqrt[3]{x}$

② $\sqrt[3]{p} = 2$

③ $\sqrt{s} = \sqrt{2s-6}$

④ $\sqrt{3+x} + \sqrt{x} = \frac{6}{\sqrt{3+x}}$

⑤ $\sqrt{2-\sqrt{r}} = \sqrt{r}$

⑥ $\sqrt{9m} = m$

⑦ $\sqrt{m} + 4 = 0$

⑧ $\sqrt{x-3} = x-5$

⑨ $2 = \sqrt{x-5} - \sqrt{x+16}$

⑩ $\sqrt{8-p} = 2 + \sqrt{2p+3}$

⑪ $a-6 = \sqrt{18-3a}$

⑫ $\sqrt{12-q} = q$

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Solving Radical Equations

Solve for the unknown variable

① $\sqrt{5x+4} = \sqrt[3]{x}$

$x = 1$

③ $\sqrt{s} = \sqrt{2s-6}$

$s = 6$

⑤ $\sqrt{2-\sqrt{r}} = \sqrt{r}$

$r = 1$

⑦ $\sqrt{m} + 4 = 0$

No solution

⑨ $2 = \sqrt{x-5} - \sqrt{x+16}$

No solution

⑪ $a - 6 = \sqrt{18-3a}$

$a = 6$

② $\sqrt[3]{p} = 2$

$p = 8$

④ $\sqrt{3+x} + \sqrt{x} = \frac{6}{\sqrt{3+x}}$

$x = 1$

⑥ $\sqrt{9m} = m$

$m = (0, 9)$

⑧ $\sqrt{x-3} = x-5$

$x = (4, 7)$

⑩ $\sqrt{8-p} = 2 + \sqrt{2p+3}$

$p = -1$

⑫ $\sqrt{12-q} = q$

$q = 3$