

Math 2 Unit 3.6 & 3.7 Quiz PRACTICE

Period _____

Solve each equation. Remember to check for extraneous solutions.

1) $\sqrt{a+6} = 2$

2) $\sqrt{26-2n} = \sqrt{n+2}$

3) $\sqrt{\frac{n}{3}} = \sqrt{12-n}$

4) $\sqrt{2-k} = k$

Write each expression in radical form.

5) $b^{-\frac{5}{6}}$

6) $(7a)^{\frac{5}{2}}$

Write each expression in exponential form. Write with a negative exponent as needed.

7) $\sqrt[3]{4n^2}$

8) $(\sqrt[4]{n})^3$

Solve each equation.

9) $r^{\frac{3}{2}} = 343$

10) $27 = n^{\frac{3}{2}}$

11) $(1-40x)^{\frac{3}{2}} = 729$

12) $-10 + 3 \cdot (81n)^{-\frac{3}{2}} = -\frac{2429}{243}$

Math 2 Unit 3.6 & 3.7 Quiz PRACTICE

Period _____

Solve each equation. Remember to check for extraneous solutions.

1) $\sqrt{a+6} = 2$

 $\{-2\}$

2) $\sqrt{26-2n} = \sqrt{n+2}$

 $\{8\}$

3) $\sqrt{\frac{n}{3}} = \sqrt{12-n}$

 $\{9\}$

4) $\sqrt{2-k} = k$

 $\{1\}$ **Write each expression in radical form.**

5) $b^{-\frac{5}{6}}$

 $\frac{1}{(\sqrt[6]{b})^5}$

6) $(7a)^{\frac{5}{2}}$

 $(\sqrt{7a})^5$ **Write each expression in exponential form. Write with a negative exponent as needed.**

7) $\sqrt[3]{4n^2}$

 $(4n^2)^{\frac{1}{3}}$

8) $(\sqrt[4]{n})^3$

 $n^{\frac{3}{4}}$ **Solve each equation.**

9) $r^{\frac{3}{2}} = 343$

 $\{49\}$

10) $27 = n^{\frac{3}{2}}$

 $\{9\}$

11) $(1-40x)^{\frac{3}{2}} = 729$

 $\{-2\}$

12) $-10 + 3 \cdot (81n)^{-\frac{3}{2}} = -\frac{2429}{243}$

 $\{1\}$