

Simplifying Radical Expressions Part 1 - PRACTICE

Date _____

Simplify.

1) $\sqrt{128}$

2) $\sqrt{108}$

3) $\sqrt{72}$

4) $-6\sqrt{27}$

5) $\sqrt{12x^{13}y^9z^4}$

6) $\sqrt{75hj^{10}k^{13}}$

7) $\sqrt{8xy}$

8) $8\sqrt{98x^3y^4z}$

Write each expression in exponential form.

9) $\sqrt[4]{3a}$

10) $(\sqrt{n})^5$

11) $(\sqrt{p})^3$

Write each expression in radical form.

12) $(2n)^{\frac{5}{6}}$

13) $x^{\frac{5}{3}}$

14) $(10k)^{\frac{7}{4}}$

Simplifying Radical Expressions Part 1 - PRACTICE

Date _____

Simplify.

1) $\sqrt{128}$
 $8\sqrt{2}$

2) $\sqrt{108}$
 $6\sqrt{3}$

3) $\sqrt{72}$
 $6\sqrt{2}$

4) $-6\sqrt{27}$
 $-18\sqrt{3}$

5) $\sqrt{12x^{13}y^9z^4}$
 $2x^6y^4z^2\sqrt{3xy}$

6) $\sqrt{75hj^{10}k^{13}}$
 $5j^5k^6\sqrt{3hk}$

7) $\sqrt{8xy}$
 $2\sqrt{2xy}$

8) $8\sqrt{98x^3y^4z}$
 $56y^2x\sqrt{2xz}$

Write each expression in exponential form.

9) $\sqrt[4]{3a}$

$$(3a)^{\frac{1}{4}}$$

10) $(\sqrt{n})^5$

$$n^{\frac{5}{2}}$$

11) $(\sqrt{p})^3$

$$p^{\frac{3}{2}}$$

Write each expression in radical form.

12) $(2n)^{\frac{5}{6}}$

$$(\sqrt[6]{2n})^5$$

13) $x^{\frac{5}{3}}$

$$(\sqrt[3]{x})^5$$

14) $(10k)^{\frac{7}{4}}$

$$(\sqrt[4]{10k})^7$$