

Worksheet P.1-P.2

College Prep Algebra

Write in set-builder notation.

1. $(-5, 10]$

2. $(-\infty, 3) \cup [5, 11)$

Write in interval notation.

3. $\{x \mid -4 < x \leq -1\} \cup \{x \mid x \geq 9\}$

4. $\{x \mid -4 < x \leq 13\}$

Assignment

Date _____ Period _____

Simplify.

1) $\sqrt{18x^4}$

2) $\sqrt{75n}$

3) $\sqrt[4]{128x^8y^2}$

4) $\sqrt[4]{48a^8b^7}$

5) $\sqrt[5]{224u^6v^7}$

6) $\sqrt[3]{256x^8y}$

Simplify. Use absolute value signs when necessary.

7) $\sqrt{294k^2}$

8) $\sqrt{252x^5}$

Simplify.

9) $(81n^6)^{\frac{1}{2}}$

10) $(16n^{12})^{\frac{1}{4}}$

11) $(36k^2)^{\frac{3}{2}}$

12) $(x^8)^{\frac{1}{2}}$

Simplify. Your answer should contain only positive exponents.

13) $x^2y^{-2} \cdot 2x^{-1}$

14) $4b^{-1} \cdot 2a^{-2}b^{-1}$

15) $(uv^{-1})^3$

16) $(x^4y^{-4})^{-3}$

17) $\frac{2a^{-1}b^3}{4ab^4}$

18) $\frac{2y^4}{4xy^2}$