

Simplifying Radicals

02/29/2012

Student Name: _____

Class: _____

Date: _____

Instructions: **Read each question carefully and select the correct answer.**

1. Simplify

$$\sqrt[4]{2,401x^{12}y^8z^7}$$

- | | |
|----|------------------------------------|
| A. | Not a real number |
| B. | $2,401^{1/4}x^{1/3}y^{1/2}z^{4/7}$ |
| C. | $7 x^3 y^2 z \sqrt[4]{z^3}$ |
| D. | $600.25x^3y^2z^{7/4}$ |

- A. A
- B. B
- C. C
- D. D

2. Simplify

$$\sqrt[4]{250a^3b^7}$$

- | | |
|----|--------------------------|
| A. | $62.5a^{3/4}b^{7/4}$ |
| B. | $1000a^{12}b^{28}$ |
| C. | Not a real number |
| D. | $ b \sqrt[4]{250a^3b^3}$ |

- A. A
- B. B
- C. C
- D. D

3. Find the corresponding option.

$$-\sqrt{-25}$$

- | | |
|----|-------------------|
| A. | $\sqrt{25}$ |
| B. | Not a real number |
| C. | 5 |
| D. | -5 |

- A. A
- B. B
- C. C
- D. D

4. Simplify

$$-\sqrt{475x^8y^2z^{16}}$$

- | | |
|----|-------------------------|
| A. | $-5x^4yz^8\sqrt{19}$ |
| B. | $-5y\sqrt{19x^8z^{16}}$ |
| C. | $-5x^2yz^4\sqrt{19}$ |
| D. | $-21x^4yz^8$ |

- A. A
B. B
C. C
D. D