

Algebra 2C
Practice Quiz on 6-1 and 6-2

Name: _____

Date: _____ Hr: _____

SHOW ALL WORK

For #1-3, find all the real square roots for the given number.

1. 0.01

1. _____

2. -1

2. _____

3. $\frac{36}{121}$

3. _____

For #4-6, find all the real cube roots for the given number.

4. 27

4. _____

5. -0.125

5. _____

6. $\frac{64}{216}$

6. _____

For #7-9, find all the real fourth roots for the given number.

7. -16

7. _____

8. 0.0081

8. _____

9. $\frac{10,000}{81}$

9. _____

For #10-13, find each real root.

10. $\sqrt[3]{-27}$

10. _____

11. $\sqrt[4]{-81}$

11. _____

12. $\sqrt{(-7)^2}$

12. _____

13. $\sqrt{-49}$

13. _____

For #14-16, simplify each radical expression.

14. $\sqrt[4]{81x^4}$

14. _____

15. $\sqrt[3]{a^{12}b^{15}}$

15. _____

16. $\sqrt[3]{-250x^2y^5}$

16. _____

For #17-20, simplify each radical expression.

17. $\sqrt[4]{8} \cdot \sqrt[3]{32}$

17. _____

18. $\sqrt[3]{-12} \cdot \sqrt[3]{-18}$

18. _____

19. $\sqrt{45x^5y^3} \cdot \sqrt{35xy^4}$

19. _____

20. $-\sqrt[3]{2x^2y^2} \cdot 2\sqrt[3]{15x^5y}$

20. _____

21. Divide and simplify.
 $\frac{\sqrt{50x^2}}{\sqrt{2x^4}}$

21. _____

22. Rationalize the denominator of $\frac{\sqrt{5}}{\sqrt{x}}$.

22. _____

