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Alg II

Quiz Review

09/07/2017

1-6B Assignment

$N^m$  roots and rational exponents

1)  $\sqrt{7} = 7^{\frac{1}{2}}$

2)  $(\sqrt[3]{2})^2 = 2^{\frac{2}{3}}$

3)  $\sqrt[4]{12^3} = 12^{\frac{3}{4}}$

3)  $(\sqrt[3]{5})^7 = 5^{\frac{7}{3}}$

5)  $\sqrt[6]{15^5} = 15^{\frac{5}{6}}$

6)  $\sqrt[8]{10^3} = 10^{\frac{3}{8}}$

7)  $3^{\frac{5}{2}} = \sqrt{3^5}$

8)  $5^{\frac{1}{3}} = \sqrt[3]{5}$

9)  $6^{\frac{3}{4}} = \sqrt[4]{6^3}$

10)  $14^{\frac{6}{7}} = \sqrt[7]{14^6}$

11)  $8^{\frac{4}{3}} = \sqrt[3]{8^4}$

12)  $7^{\frac{3}{2}} = \sqrt{7^3}$

## 1-6B Assignment

N<sup>th</sup> roots and rational exponents

13)  $\sqrt[3]{1} = 1$

14)  $(\sqrt[3]{8})^2 = 2^2 = 4$

15)  $(\sqrt[4]{16})^3 = 2^3 = 8$

16)  $\sqrt[3]{64^2} = (\sqrt[3]{64})^2 = 4^2 = 16$

17)  $\sqrt[4]{625^3} = (\sqrt[4]{625})^3 = 5^3 = 125$

18)  $(\sqrt[5]{32})^3 = 2^3 = 8$

19)  $1^{\frac{3}{5}} = 1$

20)  $(-27)^{\frac{2}{3}} = (-3)^2 = 9$

21)  $(81)^{\frac{3}{4}} = 3^3 = 27$