Name: _____

Date:: _____

Algebra & Trigonometry Quiz
Chapter R.6

Simplify. Assume that variables can represent any real number.

8. $\sqrt[3]{-8y^3}$

10. $\sqrt[4]{16z^{12}}$

12. $\sqrt[5]{-32}$

14. $\sqrt{48}$

16. $\sqrt{250}$

18. $\sqrt[3]{135}$

20. $\sqrt{162c^4d^6}$

40. $\dfrac{\sqrt{128a^2b^4}}{\sqrt{16ab}}$

42. $\sqrt{\dfrac{9x^7}{16y^8}}$

44. $\sqrt[3]{\dfrac{2yz}{250z^4}}$

54. $\left(\sqrt{6} - 4\sqrt{7}\right)\left(3\sqrt{6} + 2\sqrt{7}\right)$

Convert to radical notation and simplify.

92. $32^{-4/5}$

94. $x^{2/5}y^{-1/5}$

96. $p^{7/6}q^{11/6}$

Convert to exponential notation.

100. $\left(\sqrt[5]{12}\right)^4$

102. $\sqrt[3]{\sqrt[4]{7}}$

104. $\sqrt[3]{2}\,\sqrt{2}$