

LT #1: Unit 4 Quiz 1 Review

Date _____ Period _____

SHOW ALL WORK.**Level 1: Simplify.**

1) $\sqrt{45}$

2) $3\sqrt{3} + 2\sqrt{3}$

3) $\sqrt{6} \cdot \sqrt{15}$

Write each expression in exponential form.

4) $(\sqrt[3]{5})^4$

Level 2: Simplify

5) $\sqrt{216a^2}$

6) $2\sqrt{3} + 2\sqrt{12}$

7) $\sqrt{8n^2} \cdot \sqrt{10n^3}$

Evaluate

8) $81^{\frac{1}{2}}$

Level 3:
Simplify

9) $-2\sqrt{216x^3y}$

10) $-2\sqrt[3]{24} + 2\sqrt[3]{2} + 2\sqrt[3]{81}$

11) $5\sqrt{3m^3} \cdot \sqrt{5m^3}$

Simplify. Your answer should contain a single variable with only positive exponents

12) $\left(\frac{3}{b^2}\right)^4$

13) $2a^{\frac{5}{3}} \cdot 3a^2$

14) $\frac{3p^2}{3p^{\frac{3}{4}}}$

Level 4: Simplify. Your answer should contain only positive exponents.

15) $\left(\frac{m^{\frac{7}{4}} \cdot m}{m^2}\right)^2$

Simplify.

16) $\frac{4\sqrt{4x^3y^3}}{\sqrt{5x^4y^2}}$

Answers to LT #1: Unit 4 Quiz 1 Review (ID: 1)

1) $3\sqrt{5}$

4) $5^{\frac{4}{3}}$

7) $4n^2\sqrt{5n}$

10) $2\sqrt[3]{3} + 2\sqrt[3]{2}$

13) $6a^{\frac{11}{3}}$

16) $\frac{8\sqrt{5yx}}{5x}$

2) $5\sqrt{3}$

5) $6a\sqrt{6}$

8) 9

11) $5m^3\sqrt{15}$

14) $p^{\frac{5}{4}}$

3) $3\sqrt{10}$

6) $6\sqrt{3}$

9) $-12x\sqrt{6xy}$

12) b^6

15) $m^{\frac{3}{2}}$