Addition and Subtraction with Radicals
02/29/2012

Student Name: _____

Class: _____

Date: _____

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

1.   Subtract.

$7\sqrt[3]{24} - \sqrt[3]{375}$

   A. $10\sqrt[3]{3}$

   B. $9\sqrt[3]{3}$

   C. $-9\sqrt[3]{3}$

   D. $-6\sqrt[3]{351}$

2.   Combine the terms.   Simplify your answer.

$5\sqrt{.000147n^2 n} - .02n\sqrt{.0012n}$

   A. $.35|n|\sqrt{.03n} - .004n\sqrt{.03n}$
   B. $1.743n\sqrt{.01225n}$
   C. $.0247n\sqrt{.03n}$
   D. $-.027n\sqrt{.04n}$

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

3.   Combine the terms.   Simplify your answer.

$9ab^3\sqrt{32a^4} + 6ab\sqrt{72a^4 b^4} - 2a^2 b^2\sqrt{8a^2 b^2} + a^3 b\sqrt{128b^4}$

   A. $68a^3 b^3\sqrt{2}$
   B. $36a^2 b^3\sqrt{2} + 32a^2 b^2\sqrt{2} - a^2 b^3\sqrt{34}$
   C. $80a^3 b^3\sqrt{2} - 4|a^3||b^3|\sqrt{2}$
   D. $80a^3 b^3\sqrt{2} - 4a^4 b^4\sqrt{2}$

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

4. Find the approximate square root to the nearest tenth for each term. Then, combine the terms.

$$\sqrt{70} + \sqrt{18} - \sqrt{243}$$

A.	− 3.1
B.	− 2.6
C.	− 2.9
D.	− 3.0

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