Lesson 2 Practice Problems

1. Rewrite the following expression as a number with no exponents. Explain or show your reasoning.

$$\frac{7^{-3}}{7^{-5}}$$

(From Unit 3, Lesson 1.)

2. Find the value of each variable that makes the equation true.

   a. $(2^d)^4 = 2^{12}$

   b. $3^5 \cdot 7^5 = e^5$

   c. $5^0 \cdot 5^f = 5^4$

(From Unit 3, Lesson 1.)

3. A square has area 9 cm^2. How long are its sides?

   A. 3 cm

   B. 4.5 cm

   C. 9 cm

   D. 81 cm

4. The table shows the side length and area of several different squares. Complete the table using exact values.

side length (cm)	5		$\sqrt{63}$			$\sqrt{125}$
area (cm^2)		49		98	102	

5. Find the two whole numbers that are the closest to $\sqrt{42}$. Explain your reasoning.