### 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.)
1. Find the value of each variable that makes the equation true.
	1. $\left(2^{d}\right)^{4}=2^{12}$
	2. $3^{5}⋅7^{5}=e^{5}$
	3. $5^{0}⋅5^{f}=5^{4}$
* (From Unit 3, Lesson 1.)
1. A square has area 9 cm2. How long are its sides?
	1. 3 cm
	2. 4.5 cm
	3. 9 cm
	4. 81 cm
2. 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 (cm2)**
 | *
 | * 49
 | *
 | * 98
 | * 102
 | *
 |

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



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