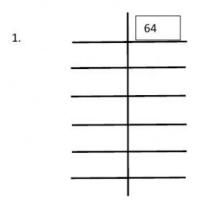Name:

**Prime Factorization of Square Roots**

**Find the Prime Factorization of the following square roots.**

**Examples:**

Square root of 16 = $\sqrt{16}$
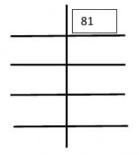
$\qquad = \sqrt{2 \times 2 \times 2 \times 2}$

$\qquad = 2 \times 2$

$\qquad = 4$

| 2 | 16 |
|---|----|
| 2 | 8  |
| 2 | 4  |
|   | 2  |

1.

| | 64 |
|---|---|

$\sqrt{64} = \sqrt{(\quad \times \quad) \times (\quad \times \quad) \times (\quad \times \quad)} = \underline{\quad} \times \underline{\quad} \times \underline{\quad} = \underline{\quad}$

2.

| | 121 |
|---|---|

$\sqrt[2]{121} = \sqrt[2]{(\quad \times \quad)} = \underline{\quad}$

Name:

3.

| | 81 |
|---|---|
| | |
| | |
| | |

$\sqrt[2]{81} = \sqrt[2]{(\quad \times \quad) \times (\quad \times \quad)} = \underline{\quad} \times \underline{\quad} = \underline{\quad}$

4.

| | 324 |
|---|---|
| | |
| | |
| | |
| | |
| | |

$\sqrt{324} = \sqrt{(\quad \times \quad) \times (\quad \times \quad) \times (\quad \times \quad)} = \underline{\quad} \times \underline{\quad} \times \underline{\quad} = \underline{\quad}$

5.

| | 900 |
|---|---|
| | |
| | |
| | |
| | |

$\sqrt{64} = \sqrt{(\quad \times \quad) \times (\quad \times \quad) \times (\quad \times \quad)} = \underline{\quad} \times \underline{\quad} \times \underline{\quad} = \underline{\quad}$