

**DEV084 Basic Math I**

**Exponents/Square Roots Practice - 1**

**I. Write the following in exponential form:**

- |   |  |
|---|--|
| 1) $6 \times 6 \times 6 \times 6 =$ _____                   | 2) $5 \times 5 \times 5 =$ _____                             |
| 3) $7 \times 7 \times 4 \times 4 =$ _____                   | 4) $3 \times 2 \times 3 =$ _____                             |
| 5) $2 \times 2 \times 2 \times 2 \times 2 \times 2 =$ _____ | 6) $3 \times 3 \times 3 \times 3 =$ _____                    |
| 7) $6 \times 6 \times 6 =$ _____                            | 8) $3 \times 2 \times 2 \times 2 \times 3 =$ _____           |
| 9) $6 \times 7 \times 6 =$ _____                            | 10) $4 \times 4 \times 4 \times 4 \times 4 \times 4 =$ _____ |

**II. Expand and compute the value of the following:**

- |  |                                      |
|--|--------------------------------------|
| 1) $6^3 = 6 \times 6 \times 6 =$ _____                                     | 2) $1^6 =$ _____ = _____             |
| 3) $7^3 =$ _____ = _____   | 4) $3^3 \times 10^2 =$ _____ = _____ |
| 5) $2^6 =$ _____ = _____   |                                      |
| 6) $3^7 = 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 =$ _____ | 7) $6^2 =$ _____ = _____             |
| 8) $4^3 =$ _____ = _____   | 9) $1^6 =$ _____ = _____             |
| 10) $2^4 \times 10^2 =$ _____ = _____                                      |                                      |

**III. Evaluate the following:**

- |                         |                          |
|-------------------------|--------------------------|
| 1) $\sqrt{100} =$ _____ | 2) $\sqrt{49} =$ _____   |
| 3) $\sqrt{144} =$ _____ | 4) $\sqrt[3]{8} =$ _____ |
| 5) $\sqrt{121} =$ _____ | 6) $\sqrt{36} =$ _____   |
| 7) $\sqrt{81} =$ _____  | 8) $\sqrt{625} =$ _____  |
| 9) $\sqrt{256} =$ _____ |                          |

- |                     |                     |            |             |            |           |
|---------------------|---------------------|------------|-------------|------------|-----------|
| I. 1) $6^4$         | I. 6) $3^4$         | II. 1) 216 | II. 6) 2187 | III. 1) 10 | III. 6) 6 |
| 2) $5^3$            | 7) $6^3$            | 2) 1       | 7) 36       | 2) 7       | 7) 9      |
| 3) $7^2 \times 4^2$ | 8) $2^3 \times 3^2$ | 3) 343     | 8) 64       | 3) 12      | 8) 25     |
| 4) $2 \times 3^2$   | 9) $6^2 \times 7$   | 4) 2700    | 9) 1        | 4) 2       | 9) 16     |
| 5) $2^6$            | 10) $4^6$           | 5) 64      | 10) 1600    | 5) 11      |           |