

UNIT 1 – ROOTS AND POWERS

Quiz – Sections 4.2 and 4.3

K. Sears

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NAME: _____

DATE: _____

1. Use a calculator to evaluate each of the following correct to **TWO** decimal places. **(3)**

a) $\sqrt{79} = \underline{\hspace{2cm}}$ b) $\sqrt[3]{-150} = \underline{\hspace{2cm}}$ c) $\sqrt[4]{500} = \underline{\hspace{2cm}}$

2. Classify each of the following as either **Rational (Q)** or **Irrational (Q̄)** numbers. **(3)**

a) $\sqrt{441} = \underline{\hspace{2cm}}$ b) $\sqrt[3]{300} = \underline{\hspace{2cm}}$ c) $\sqrt{\frac{9}{4}} = \underline{\hspace{2cm}}$

3. Arrange the following in order from **least to greatest**: **(2)**

$\sqrt{27}$; $\sqrt[4]{1055}$; $-5\sqrt[3]{5}$; $\sqrt[5]{-243}$

4. Express each of the following as radicals in **simplest form**. Please show your thought process. **(6)**

a) $\sqrt{75}$ b) $\sqrt[3]{56}$ c) $\sqrt[4]{648}$

5. Express each of the following mixed radicals as an **entire** radical. Please show your thought process. **(6)**

a) $11\sqrt{3}$ b) $6\sqrt[3]{5}$ c) $2\sqrt[5]{4}$