Multiple Choice Warm Up

1. A cube has a volume of $5488cm^3$. Determine the edge lenght of the cube as a radical in simplest form.

a) $14\sqrt{2}$ b) 14 c) $7\sqrt[3]{2}$ d) $14\sqrt[3]{2}$

2. Evaluate $\sqrt[4]{81}$

a) $\sqrt[4]{3}$ b) $\sqrt{3}$ c) 3 d) 9

3. Which of the following are equivalent to $4\sqrt[3]{12}$

a) $\sqrt[3]{768}$ b) $\sqrt{768}$ c) $\sqrt[3]{192}$ d) 768

4. Write the equivalent form of 4 as a cube root.

a) 12 b) 64 c) $\sqrt[3]{64}$ d) $\sqrt{64}$

1. A cube has a volume of 5488cm^3. Determine the ~~edge~~ side lenght of the cube as a radical in simplest form.

a) $14\sqrt{2}$ b) 14 c) $7\sqrt[3]{2}$ d) $14\sqrt[3]{2}$

$V = l \times w \times h$

$V = s \times s \times s$

$5488 = s^3$

$\sqrt[3]{5488} = s$

$\sqrt[3]{5488}$

$\sqrt[3]{2 \times 2 \times 2 \times 2 \times 7 \times 7 \times 7}$

$2 \times 7\sqrt[3]{2}$

$14\sqrt[3]{2}$

2. Evaluate $\sqrt[4]{81}$

a) $\sqrt[4]{3}$ b) $\sqrt{3}$ c) 3 d) 9

$\sqrt[4]{3 \times 3 \times 3 \times 3}$

$= 3$

3. Which of the following are equivalent to $4\sqrt[3]{12}$

a) $\sqrt[3]{768}$ b) $\sqrt{768}$ c) $\sqrt[3]{192}$ d) 768

$4\sqrt[3]{12\times4\times4\times4}$

$= \sqrt[3]{768}$

4. Write the equivalent form of 4 as a cube root.

a) 12 b) 64 c) $\sqrt[3]{64}$ d) $\sqrt{64}$

$4 \times 4 \times 4 = 64$

$4 = \sqrt[3]{64}$