Name_____

DIAGNOSTIC

Common Core Standard 8.EE.A.2 – Expressions and Equations

☐ **Find q, if $q^2 = \frac{0.64}{1.21}$. Be sure to show your work.**

A $\frac{6}{11}$

B $\frac{8}{11}$

C $\frac{0.8}{0.11}$

D 2

Common Core Standard 8.EE.A.2 – Expressions and Equations

☐ **Which row arranges the values from least to greatest? Be sure to explain your answer.**

A $\sqrt[3]{216}$, $\sqrt{121}$, $\sqrt[3]{0.064}$, $\sqrt{6.25}$,

B $\sqrt[3]{0.064}$, $\sqrt{6.25}$, $\sqrt[3]{216}$, $\sqrt{121}$

C $\sqrt{6.25}$, $\sqrt[3]{216}$, $\sqrt{121}$, $\sqrt[3]{0.064}$

D $\sqrt[3]{0.064}$, $\sqrt[3]{216}$, $\sqrt{6.25}$, $\sqrt{121}$

Common Core Standard 8.EE.A.2 – Expressions and Equations

☐ **The volume of a cube is 512 cm^3. What is the surface area of the cube? Be sure to show your work.**

A 314 cm^2

B 284 cm^2

C 36 cm^2

D 384 cm^2

Name_____

DIAGNOSTIC

Common Core Standard 8.EE.A.2 – Expressions and Equations

☐ **Connor decided to tile his square-shaped bathroom. He is laying 676 square feet of tile. What is the length of one side of Connor's bathroom? Be sure to show your work.**

A 26 feet

B 14 feet

C 24 feet

D 16 feet

Common Core Standard 8.EE.A.2 – Expressions and Equations

☐ **The value of which expression is 9? Be sure to show your work.**

A $\sqrt[3]{343} - \sqrt{\frac{64}{16}}$

B $\sqrt{343} + \sqrt{\frac{64}{16}}$

C $\sqrt[3]{343} + \sqrt{\frac{64}{16}}$

D $\sqrt[3]{343} \times \sqrt{\frac{64}{16}}$

Common Core Standard 8.EE.A.2 – Expressions and Equations

☐ **Which of the following equations is true? Be sure to show your work.**

A $\sqrt[3]{216} \times \sqrt[3]{8} = \sqrt[3]{1728}$

B $\sqrt[3]{216} \times \sqrt{8} = \sqrt{1728}$

C $\sqrt[3]{216} + \sqrt[3]{8} = \sqrt[3]{1728}$

D $\sqrt[3]{216} - \sqrt[3]{8} = \sqrt[3]{1728}$