Quiz #1 Solution
Average: 9/10

1. Evaluate each expression; if a solution does not exist in real numbers, write DNE.

$$\frac{8}{\sqrt{-\pi}}$$

DNE, because there is no real number that you can take to the power of 8 to get \(-\pi\) (or negative anything)

2. Simplify the following expression completely. Do **NOT** leave negative exponents in your answer.

$$32^{-\frac{2}{5}} + \left( -\frac{125}{8} \right)^{\frac{2}{3}}$$

$$\frac{1}{32^{\frac{2}{5}}} + \left( \frac{3}{\sqrt[3]{-125}} \right)^{2}$$

$$\frac{1}{(\sqrt[5]{32})^{2}} + \left( -\frac{5}{2} \right)^{2}$$

$$\frac{1}{(2)^{2}} + \frac{25}{4}$$

$$\frac{1}{4} + \frac{25}{4}$$

$$\frac{26}{4}$$

$$\frac{13}{2}$$