2023 Mission Math Utah Spring Competition (K-2) Theme Round

You will have 20 minutes to complete as much of this test as you can. There are 10 free response questions total, and questions are arranged roughly from easiest to most difficult. Units are not needed. Write answers on the given line below each question. Calculators are not allowed. Do not begin the test until told to do so. Good Luck!

Full Name: _____

Grade: _____

Age: _____

1. In order to get to the Pewter Gym, Ash walks 4 miles north, then he walks 6 miles east. How many miles did Ash walk in total?

_____

2. Pikachu has 10 thunderbolts, and it takes 2 thunderbolts to defeat a wild Pidgey. How many Pidgeys can Pikachu defeat with its thunderbolts?

_____

3. Ash has caught 6 Pokémon so far, and he wants to catch 10 more to complete his mini-Pokédex. If he catches 2 Pokémon every day, how many days will it take for Ash to complete his Pokédex?

_____

4. Cynthia brings her two Pokémon, Garchomp and Lucario, 18 rare candies. How many rare candies does each one of them get if the three of them equally split the rare candies?

_____

5. Aaron and Erin are having a Pokémon battle. In total, they do 320 damage on each other. If Aaron does 215 damage on Erin, how much damage did Erin inflict on Aaron?

_____

6. Alex has 168 Pokémon cards while Alexa has 56. What is the ratio of the number of cards Alex has to Alexa?

_____

7. Bulbasaur can run 1 mile in 10 minutes while Charmander can run 2 miles in 15 minutes. How many more miles could Charmander run in 30 minutes?

—————————

8. The dimensions of the Pewter City gym are 50 yards by 100 yards. What is the area of the gym in square yards?

—————————

9. Brock is going to buy a lemonade at the Pokémart. He notices that if he pays in all Pokéquarters, which is $\frac{1}{4}$ of the value of a Pokédollar, he will use 9 fewer coins than if he paid in Pokédimes, which is $\frac{1}{10}$ of the value of a Pokédollar. To the nearest hundredth, how many Pokédollars is a lemonade at the Pokémart?

—————————

10. Sofie has 5 Pokémon cards, exactly one of which is a Squirtle. What is the probability that if she randomly arranges these cards, the Squirtle is first? Express your answer as a common fraction.

—————————