Glaciers, Water and Wind, Oh My! Activity – Erosion Math Worksheet – *Answers*

1. If a 12-acre forest lost \( \frac{1}{4} \) of its trees due to acid rain, how many acres would be undamaged?

   \[
   12 \div 4 = 3 \\
   12 - 3 = 9 \text{ acres}
   \]

2. If property damage due to erosion along the coast is $60 million each year, how much money would be spent in 4 years?

   \[
   64 \times 4 = $256 \text{ million}
   \]

3. Your favorite beach has 42 large sand dunes. Throughout the course of the year, wind erosion destroys 8 sand dunes and creates 13 new ones. How many sand dunes would there be at the end of the year?

   \[
   42 - 8 = 34 \\
   34 + 13 = 47 \text{ sand dunes}
   \]

4. One side of a mountain is 5,280 feet long. If a glacier were to start at the very top of the mountain and travel 3 feet per year, how long would it take the glacier to reach the bottom of the mountain?

   \[
   5,280 \div 3 = 1,760 \text{ years}
   \]

5. On a cold day in July, you notice a new crack in the sidewalk at 10:30 a.m. At 11:13 a.m. you notice the crack has doubled in length. How much time did it take for the crack to double in length?

   \[
   43 \text{ minutes}
   \]