NAME: _____ DATE: _____

SPOOKTACULAR 8TH GRADE MATH WORKSHEET

Directions: Show all your work for each monster-themed problem below!

THE PYTHAGOREAN THEOREM (HAUNTED HEIGHTS)

1. A spooky ladder is leaning against the side of a haunted house. The base of the ladder is 6 feet away from the house, and it reaches a window 8 feet high. What is the length of the ladder?

Answer: _____

2. A vampire bat flies 15 yards due east from its cave, then turns and flies 20 yards due north to a graveyard. What is the direct distance (the hypotenuse) from the bat's cave to the graveyard?

Answer: _____

SCIENTIFIC NOTATION (ZOMBIE INVASION)

3. A local zombie outbreak started with a small horde of 3×10^3 zombies.
By the next full moon, the horde had multiplied by 2×10^1.
How many zombies are there in total now? Write your answer in scientific notation.

Answer: _____

4. A ghost can travel across town in 4×10^2 hours, while a vampire takes 8×10^3 hours.
How much faster (in hours) is the vampire compared to the ghost? Express your answer in scientific notation.

Answer: _____

LINEAR EQUATIONS & SLOPE (MONSTER MASH)

5. Count Dracula charges a flat entry fee of $5 plus $2 per hour to dance at the Monster Mash.
Write a linear equation in slope-intercept form $(y = mx + b)$ to represent the total cost (y) for attending for x hours. How much would it cost to dance for 4 hours?

Answer: _____

6. A mummy unwraps at a constant rate. After 2 minutes, the mummy has lost 14 inches of bandages.
What is the rate of unwrapping in inches per minute (the slope)?

Answer: _____