Each statement below is called a cryptarithm. Every different letter represents a unique number from 0 to 9. As usual, natural numbers are not written with a leading zero. For instance, the number twenty-seven will be written 27, and not 027. Solve each of the puzzles below and have some fun!

**Problems**

1. \(AB - BA = A\)

2. \(A + BB = ADD\)

3. \(BC + B = DAD\)

4. \(BC + DC = CAB\)

5. \(HEN + E = EGG\)

6. \(DAD + DAD + DAD + DAD + DAD = GLAD\)

**Challenge Problems**

7. What is the product of the following single-digit numbers?
\[
C \times H \times A \times P \times E \times L \times I \times L \times M \times A \times T \times H \times C \times I \times R \times C \times L \times E
\]

8. A prime number is a number with exactly two factors. What is \(PR + I = ME\) if \(PR, I,\) and \(ME\) are prime numbers?\(^2\)

---

\(^1\) Based on Camp Logic, by Mark Saul and Sian Zelbo.

\(^2\) This problem was created by Hector Rosario.