

**Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Problem 1** (8 points). A man is walking away from a lamppost with a light source 10m above the ground. The man is 2m tall. How far away is the man from the lamppost when his shadow is 5m long?

**Problem 2** (2 points). Solve  $x^2 + 30x + 200 = 0$ .