

Name:

Math 2 • Spring 2021 Final Sample

**[A] Show your work carefully in each of the problems below. Show all work with equations only, and make sure each equation has a variable.**

1. Solve  $3x^2 + 20x = -12$  by factoring.

2. Find the x-intercepts of  $y = 4(x + 1)^2 - 36$ .

3. Use the quadratic formula to solve  $2x^2 = 9x + 6$ . Round solutions to the nearest hundredth.

**[B] Find the following for  $m(x) = x^2 + 18x + 32$ . For each problem other than the sketch, show all work with equations only, and make sure each equation has a variable.**

1. the vertex

2. the y-intercept

3. the x-intercepts

4. a sketch