

Math 3280 Worksheet 19: Curve-fitting with matrices

Group members (2 to 4): _____

(1) Using the equation

$$Ax + By + C = x^2 + y^2,$$

find a circle passing through the points $(1, 7)$, $(-1, 3)$, and $(0, 0)$. After finding A , B , and C , put the circle's equation in the standard form

$$(x - c_x)^2 + (y - c_y)^2 = r^2.$$

(complete the squares.)