

LEVEL CURVES 2

For each function below, draw the level curves corresponding to the given values of z . Use the same set of axes for each particular function, and correctly label all x - and y -intercepts.

1. $z = |x| + |y|$ $z = 1$

2. $z = x^2 + y^2$ $z = 1, 4, 7$

3. $z = x^2$ $z = 0, 1, 2$

4. $z = x^2 - y^2$ $z = -2, 0, 2$

5. $z = 2x + y + 1$ $z = -2, 0, 2$