

1. Find an expression for the distance between the point  $(3, 5, 2)$  and the plane  $z = k$ , where  $k$  is a constant.

expression:

2. Find an expression for a level surface of the function

$$f(x, y, z) = \cos(2x + y).$$

Is the level surface a

- ☐ plane    ☐ sphere or ellipsoid    ☐ circular or elliptical paraboloid    ☐ cylinder