

## General Stuff

- Office Hours: Today after class 12:30 - 1:30, Thursday before class 10 - 11am
- Lab 0 Due tonight
- Quiz parameters

15 min + 5 min to upload

At the end of class on Thursday

No notes or calculators

Cameras TURNED ON until you've uploaded to gradescope and checked in with me

## Review

- How to make a plane

Cartesian equation (normal vector + constant)

Parametrization (two direction vectors + point in the plane)

1. Find the equation of the plane that contains the three points  $(0, 1, 3)$ ,  $(1, 1, 0)$ , and  $(3, 0, -1)$ .

**2.** Find the equation of the plane which contains the line  $\ell(t) = (-1, 0, 1) + t(-4, 1, -1)$  and is perpendicular to  $2x - y = 3$ .

Take 15 minutes to work on the following problems.

**3.** Find the equation of the plane which contains the 3 points  $(-3, 1, 1)$ ,  $(2, 1, -1)$ , and  $(0, 0, 1)$ .

**4.** Find the equation of the plane containing the two lines  $\ell_1(t) = (0, 2, 0) + t(-1, 2, 0)$  and  $\ell_2(t) = (1, 0, 0) + t(0, 3, 1)$ .

**5.** Find the parametrization of the line which is the intersection of the planes  $x + y - z = 2$  and  $-2x + 3y - z = 3$ .

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