

# Math 1303 - Math in the Liberal Arts

## Quiz #13 - 2005.11.11

### Solutions

---

1. Graph the solution set of the following inequality, where  $z$  is an integer, on the number line given below.

$$2 \leq -4z + 2 < 26$$

$$0 \leq -4z < 24$$

$$0 \geq z > -6$$



2. Graph the line given by the equation  $y = -\frac{2}{3}x + 3$  on the coordinate plane below.

Notice that the equation is in *slope-intercept* form. The *y-intercept* is 3, so the first point is  $(0, 3)$ . Since the slope is  $m = -\frac{2}{3}$ , we go to down two to  $y = 1$  and to the right 3, so  $x = 3$ , so the second point is  $(3, 1)$ . Note that we could also have gone up 2 and to the left 3 to get the point  $(-3, 5)$ . The graph is given below.

