

Your name

Homework 9.100, April 26, 2022

0. Do CLT 104, 105, 106.
1. On your inflatable globe, draw a straight line as far as you can.
2. Draw a triangle from the North Pole to two points on the equator. The three angles will not add up to exactly 180 degrees. Will they add up to more, or to less?
3. Show that there is more than one shortest line between the North Pole and the South Pole.
4. Draw the shortest line between Chicago and Vladivostok. Draw the line of latitude between Chicago and Vladivostok. What route would you use if you were flying an airplane between them?
5. On this paper, graph the points $A = (0, 0)$, $B = (0, 4)$, $C = (4, 0)$, and $D = (4, 4)$.

6. What is the distance between the points $(0,0)$ and $(0,4)$?

7. What is the distance between the points $(0,0)$ and $(4,4)$?

8. What is the slope of the line between $(0,0)$ and $(3,1)$? (that is, what is the Rise over the Run?)

9. Draw the line with the equation $y = 2x + 1$.

10. What is the slope of the line with equation $y = 2x + 1$? (that is, what is the Rise over the Run?)

11. What is the slope of the line with equation $y = .5x$? Draw the line.