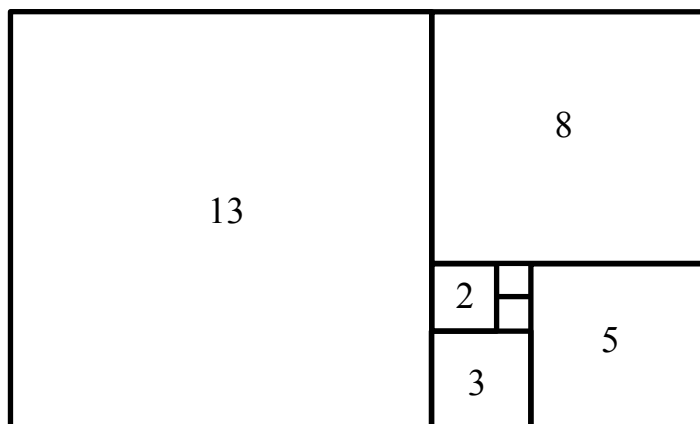


## Geometry Homework #11 – Answer Key

1)



2)  $a_n = -6(4)^{n-1}$

3)  $\frac{1597}{987} \approx 1.618$

4) 3,695,153

5)  $a_n = 24\left(\frac{3}{2}\right)^{n-1}$       923 students

6) Chord AB =  $8\sqrt{2}$ , Arc angle AB =  $90^\circ$ , Arc length AB =  $4\pi$ , Area of Sector ACB =  $16\pi$

7)  $31^\circ$

8)  $34^\circ$

9) Chord AB =  $12\sqrt{3}$ , Arc angle AB =  $240^\circ$ , Arc length AB =  $16\pi$ , Area of Sector ACB =  $48\pi$

10)  $69^\circ$

11) 9

12) Chord AB = 18, Arc angle AB =  $60^\circ$ , Arc length AB =  $6\pi$ , Area of Sector ACB =  $54\pi$

13)  $11^\circ$

14)  $14\sqrt{3}$

15) Chord AB =  $48\sqrt{3}$ , Arc angle AB =  $240^\circ$ , Arc length AB =  $64\pi$ , Area of Sector ACB =  $768\pi$

16)  $22^\circ$

17)  $9\sqrt{2}$

18) Chord AB =  $10\sqrt{2}$ , Arc angle AB =  $90^\circ$ , Arc length AB =  $5\pi$ , Area of Sector ACB =  $25\pi$

19) Chord AG = 20, segments DB = 9, ED = 12, CD = 3.5, BAG =  $32^\circ$ , arcs BG =  $64^\circ$  EA =  $116^\circ$

20) Arc AG =  $120^\circ$ , arc length AG =  $\frac{16\pi}{3}$ , and chord AG =  $8\sqrt{3}$