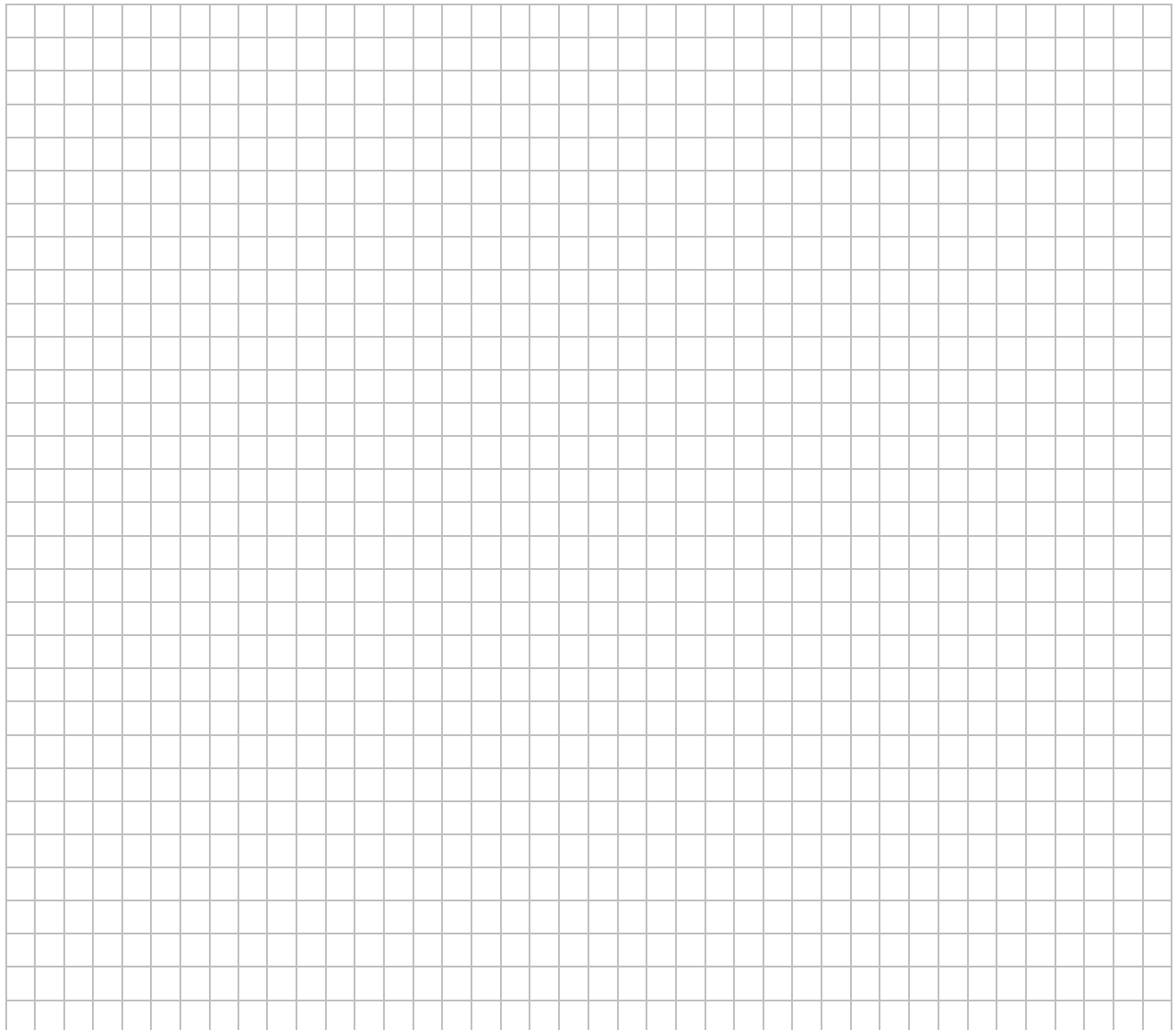


Draw a sketch of your yard in the grid below from a birds-eye-view. Start by drawing the shape of your whole yard in the grid, most yards are not rectangular like this.

- Draw an approximate shape of your house and placement in your yard and color it yellow.
- Outline the grass areas and color it green.
- The other areas of your yard are called landscaped beds. (they have shrubs and flowering plants)
- Get adult to turn on each zone of the sprinklers so you can add them to the drawing in the grass area.
- Indicate sprinklers as black circles and write which zone they are in on the page.
- Place 5-7 tuna cans or equivalent in each zone evenly, draw their location on your sketch and run the system for 5 minutes.
- Write the amount of water that falls in each tuna can. This information will be used on data sheet.
- Repeat for each zone.



Data sheet:

1. How many zones are there for your grass? _____
2. For each zone fill in the data table below:

Can number	Example Zone Water depth (in)	Zone 1 Water depth (in)	Zone 2 Water depth (in)	Zone 3 Water depth (in)	Zone 4 Water depth (in)
1	0.15				
2	0.1				
3	0.25				
4	0.05				
5	0.15				
6	0.075				
7	0.1				
Average (in.)	0.125				
Application rate	0.025				

To calculate the depth of water your irrigation system puts on your grass.

1. You will need to determine an application rate from your cans. To do this take average and divide by 5 (time you ran your system). Use the table above to fill in data.
(example: $0.125 \text{ in} / 5 \text{ minutes} = 0.025 \text{ in/min}$ application rate)
2. To calculate total water applied you need to know run time of each zone from your timer. Then you take total runtime* application rate= total depth of water applied.
(example: $0.025 \text{ in/minute} * 25 \text{ minutes} = 0.625 \text{ inches}$).

	Example Zone Water depth (in)	Zone 1 Water depth (in)	Zone 2 Water depth (in)	Zone 3 Water depth (in)	Zone 4 Water depth (in)
Application rate calculated above (in/min)	0.025				
Total runtime from timer (min)	25				

Total depth for full cycle	0.625 in				
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0.5- 0.75 inches of water to revitalize grass (Trenholm, Unruh, and Cisar 2005). Remember this can come as rain and number of days grass can go between watering changes seasonally. Overwatering can waste water, decrease grass health, and cause pests and weeds. St. Johns River Water Management District has irrigation restrictions that allow watering 1 day a week in fall / winter and 2 days a week in spring / summer. See <https://www.sjrwmd.com/water-conservation/savingwater/outdoors/#irrigation-tips> for more information on irrigation.

Average Water depth after 5 minutes (inches)	=	Total time needed to water ¼ inch (minutes)
0.0625	=	60
0.083	=	45
0.125	=	30
0.25	=	15
3/4"	=	5

3. Now that you have calculated the depth of water your irrigation is puts out, compare that to the amount of water that your grass needs (0.5- 0.75 inches). Can your family conserve water by reducing the amount of time that irrigation system runs?

Cited documents: Trenholm, L., J. Unruh, and J. Cisar. 2005. Watering Your Florida Lawn. EDIS Publication. <https://edis.ifas.ufl.edu/lh025>

Resource used. (to be deleted before distribution) <https://www.regionalh2o.org/measure-your-sprinklers-water-use-watering-gauges>