

Name: \_\_\_\_\_

## Design a Garden Project

Congratulations!!! You are a professional garden designer. You have just received your first client request in an email listed below:

Dear Garden Designer,

I have moved into a house with a small garden that needs a total redesign. Please design my garden for me. I have attached an accurate scale drawing of my garden to this email. I've listed below some features I want in the garden. I will email you later about some other things I also want.

To start, please could you draw these features accurately on the plan, showing where you think they should go in the garden. Send me your plan with an explanation of your thinking.

Best wishes,

Mandy

### Shed

I've ordered this shed. It is 2 meters wide, 3.25 meters long and 2.8 meters tall.



### Decking for barbeques

I want some decking near the patio doors. It should be big enough to seat at least six people.



### Circular pond

I would like a circular pond. I'd like its area to be about  $7 \text{ m}^2$ .

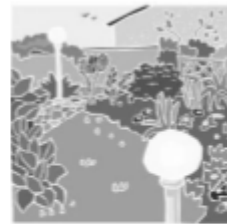


### Path and Borders

I would like some flower borders. These should not be more than one meter wide as I find wider ones difficult to look after.

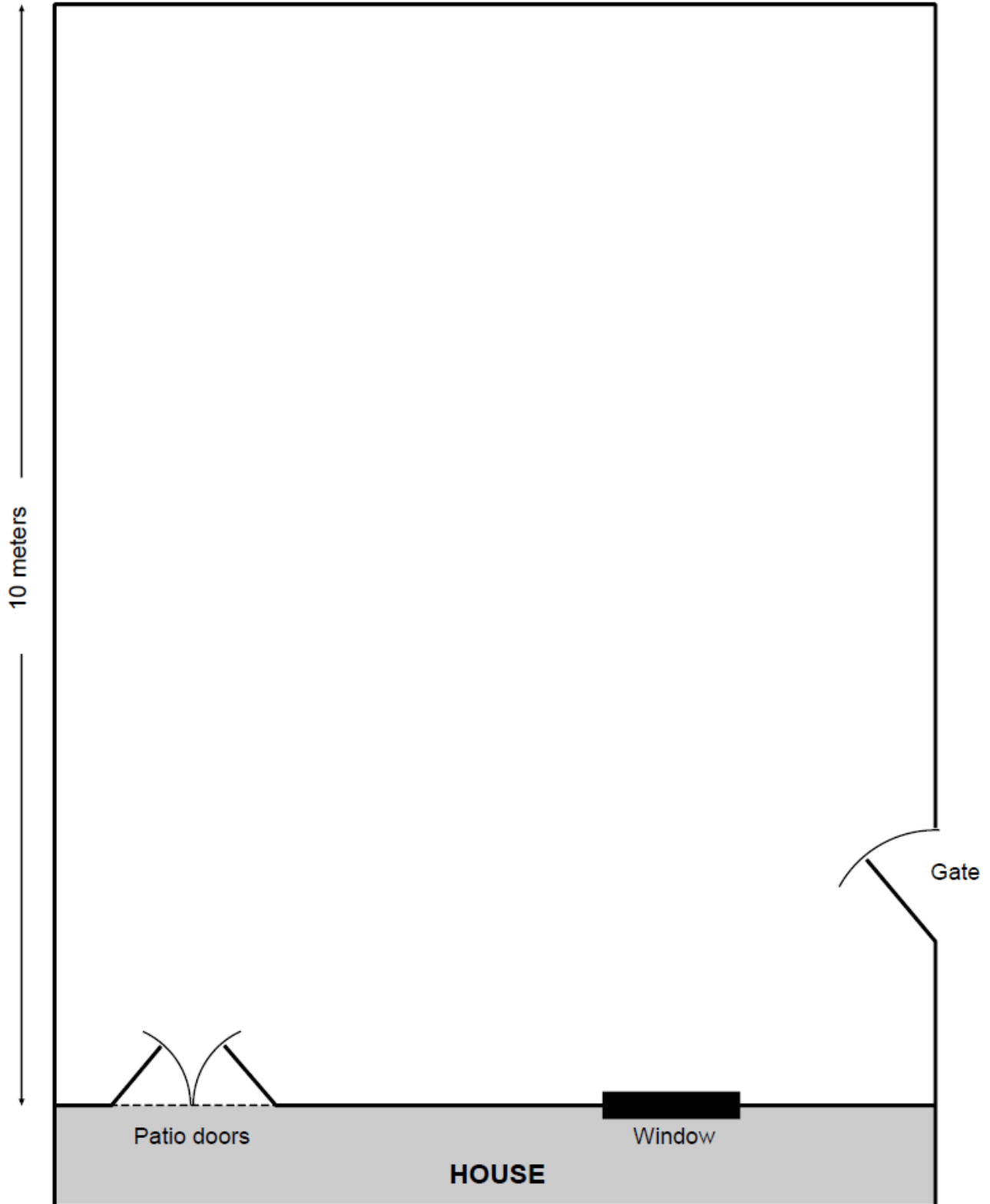
I'd like a gravel path 1 meter wide to go from the shed to the house and from the garden gate to the house.

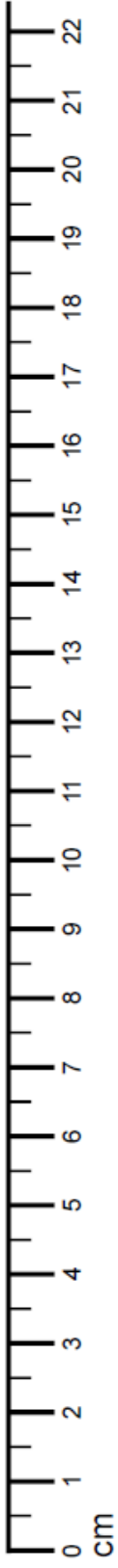
I will cover the rest with grass.



- Use the sheet *Garden Plan* to draw the SCALED features from the email.
- Make sure you record the scale you use on the plan.
- Record ALL of your calculations AND reasoning on the *Garden Plan Reasoning* sheet.
- Cut out the centimeter rulers to help with your drawing.

# Garden Plan





## Mandy's Second Email

Hello again,

I need to know some costs of the things on your plan.  
Please can you work these out for me?

Best wishes,

Mandy

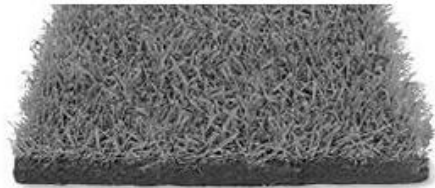
### **Gravel path**

Please tell me the approximate cost of the gravel path you have drawn.  
The gravel should be about 8 cm deep.  
Gravel costs \$40 per cubic meter.



### **Grass**

Please tell me the approximate cost of the grass area.  
Grass costs \$3 per square meter.



Name: \_\_\_\_\_

## Garden Plan Reasoning Sheet

All calculations for all SCALED items contained on your Garden Plan MUST be shown in the column on the left; explanations for your reasoning, in complete sentences, must appear in the right hand column and must accompany your completed Garden Plan.

<b>SHED CALCULATIONS</b>	<b>Explanation:</b>
<b>DECKING DIMENSIONS</b>	<b>Explanations:</b>
<b>CIRCULAR POND DIMENSIONS</b>	<b>Explanation:</b>
<b>PATH AND BORDERS</b>	<b>Explanation:</b>

## Cost Calculations

**GRASS**

**TOTAL COST OF GRASS BASED ON FINAL GARDEN PLAN:**

**GRAVEL PATH (hint: how much gravel is needed? You already calculated the path dimensions for a 2 dimensional drawing but the gravel goes deep as well. What kind of calculation would take all three dimensions into consideration?)**

**TOTAL COST OF GRAVEL PATH BASED ON FINAL GARDEN PLAN:**

# Garden Plan Reflection Sheet

Please respond to the following in complete sentences:

1) What was the easiest part of this Garden Project for you and why?

2) What was the most difficult part of this Garden Project for you and why?