**A Backyard Bash**

Block:

Name:

Your parents have just purchased a new home. They wish to renovate the backyard and have asked for your help. You have always wanted to have a pool in the backyard and your parents have agreed on the condition that you must help in the whole planning process.

After much planning you and your parents have decided on the following list of items for the backyard:

|  |  |
| --- | --- |
| * An in-ground pool * A safety fence around the pool * A shed for the bikes and equipment * Fencing around the entire backyard | * A cement walkway around the pool * A patio with patio stones * Grassy area |

**Your Task:**

1. Fill out your plan/design of the backyard on the graph paper provided. It must be real-world realistic.

2. Determine how much it will cost you to renovate your backyard.

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| --- | --- | --- | --- |
| **Item** | **Description** | **Item** | **Description** |
| Backyard | 🡪dimensions of the backyard are 20m x 20m | Patio | 🡪is covered with square patio stones  🡪the patio length is a least twice its width  🡪patio stones measure 0.5m x 0.5m  🡪patio stones cost $3.75 each |
| In-ground pool | 🡪cannot take up more than 10% of the total backyard area  🡪city bylaws state that the pool must be located at least 1.5m away from the edge of the property line and at least 5m from the house  🡪basic price of $10 000 plus an additional $500 per m2 of area | Shed | 🡪must be in the shape of an isosceles right triangle  🡪needs to have an area of at most 20m2  🡪along the front face of the shed you want to hang a string of decorative lights  🡪decorative light cost $2.99/m  🡪shed is a gift from your grandparents and has no cost |
| Safety Fence Around The Pool | 🡪by law your pool must be fences in completely  🡪This safety fence must be located at least 1m away from the edge of the pool  🡪cost of the fence is $15/m | Sod (grass) | 🡪will be put on all remaining areas of the yard.  🡪sod costs $5/m2 |
| Cement Walkway Around The Pool | 🡪the walkway is made of cement  🡪this walkway surrounds the outside edge of the pool  🡪the walkway is 1m wide  🡪the cement costs $17.99/m2 | Fence Around the Entire Backyard | 🡪must enclose the backyard completely  🡪costs $10.79/m |

**Diagram explaining the walkway**

Cement walkway around the pool

**You have been given a total budget of $35 000 to complete the entire project. Do not over spend!**

Pool

**Total Cost**

|  |  |
| --- | --- |
| **Item** | **cost** |
| Pool |  |
| Sod (grass) |  |
| Patio |  |
| Safety fence for pool |  |
| Fencing around yard |  |
| Decorative lights on shed |  |
| Cement walkway around pool |  |
| Total Cost of the Entire Project |  |

These are diagrams of the entire backyard. One is your rough copy, the other is for the good copy.

Good copy

Rough copy

House

House

garage

garage

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