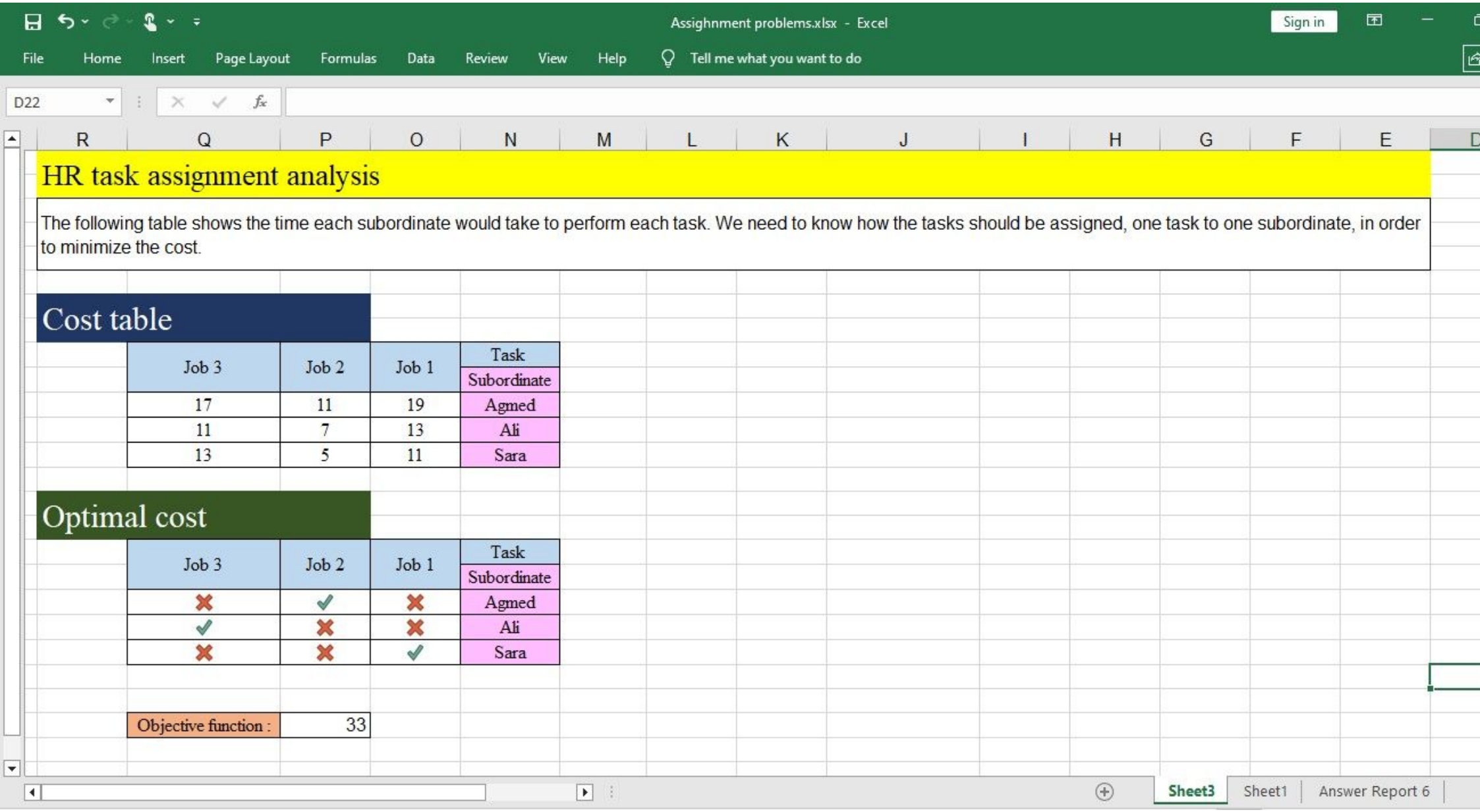
Assighnment problems.xlsx - Excel
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D22
R Q P O N M L K J I H G F E
HR task assignment analysis
The following table shows the time each subordinate would take to perform each task. We need to know how the tasks should be assigned, one task to one subordinate, in order to minimize the cost.
Cost table
Job 3 Job 2 Job 1 Task / Subordinate
17 11 19 Agmed
11 7 13 Ali
13 5 11 Sara
Optimal cost
Job 3 Job 2 Job 1 Task / Subordinate
✗ ✓ ✗ Agmed
✓ ✗ ✗ Ali
✗ ✗ ✓ Sara
Objective function : 33
Sheet3 Sheet1 Answer Report 6

Microsoft Excel 16.0 Answer Report
Worksheet: [Assighnment problems.xlsx]Sheet1
Report Created: 07/07/2024 02:51:33 pm
Result: Solver found a solution. All Constraints and optimality conditions are satisfied.
Solver Engine

Engine: Simplex LP
Solution Time: 0.25 Seconds.
Iterations: 10 Subproblems: 0

Max Time Unlimited, Iterations Unlimited, Precision 0.000001

Max Subproblems Unlimited, Max Integer Sols Unlimited, Integer Tolerance 1%, Assume NonNegative

Solver Options

Objective Cell (Min)

Final Value	Original Value	Name	Cell
33	0	Objective function : Job 1	$D$26

Variable Cells

Integer	Final Value	Original Value	Name	Cell
Binary	0	0	Agmed Job 1	$D$21
Binary	1	0	Agmed Job 2	$E$21
Binary	0	0	Agmed Job 3	$F$21
Binary	0	0	Ali Job 1	$D$22
Binary	0	0	Ali Job 2	$E$22
Binary	1	0	Ali Job 3	$F$22
Binary	1	0	Sara Job 1	$D$23
Binary	0	0	Sara Job 2	$E$23
Binary	0	0	Sara Job 3	$F$23

Constraints

Slack	Status	Formula	Cell Value	Name	Cell
0	Binding	$D$24=$D$25	1	Job 1	$D$24
0	Binding	$E$24=$E$25	1	Job 2	$E$24
0	Binding	$F$24=$F$25	1	Job 3	$F$24
0	Binding	$G$21=$H$21	1	Agmed	$G$21
0	Binding	$G$22=$H$22	1	Ali	$G$22
0	Binding	$G$23=$H$23	1	Sara	$G$23
					$D$21:$F$23=Binary