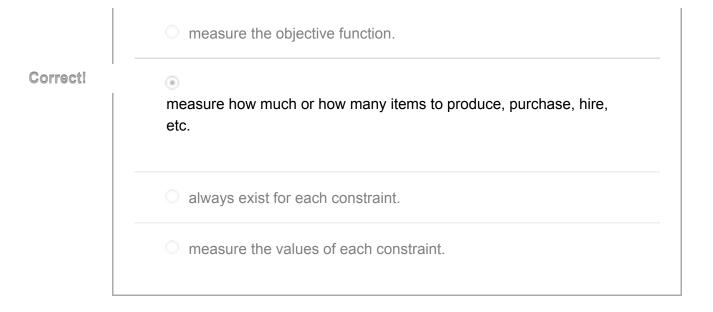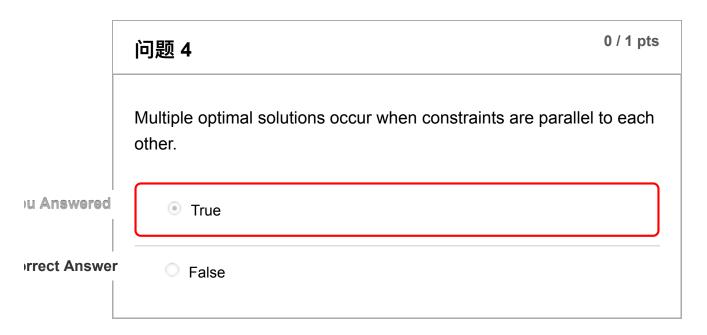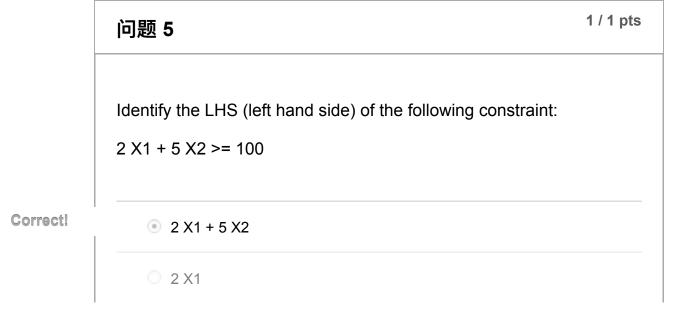# Quiz 1: Linear Optimization Results for Liangrui Lu

Score for this attempt: **6** out of 10

Submitted Sep 12, 2021 at 2:55pm

This attempt took 15 minutes.

问题 1	0 / 1 pts

The feasible solution area contains infinite solutions to the linear program.

orrect Answer

   ○ True

u Answered

   ◉ False

问题 2	1 / 1 pts

The first step in formulating a linear programming model is to define the objective function.

   ○ True

Correct!

   ◉ False

问题 3	1 / 1 pts

Decision variables:

measure the objective function.

Correct!

⦿ measure how much or how many items to produce, purchase, hire, etc.

○ always exist for each constraint.

○ measure the values of each constraint.

问题 4   0 / 1 pts

Multiple optimal solutions occur when constraints are parallel to each other.

ou Answered

⦿ True

rrect Answer

○ False

问题 5   1 / 1 pts

Identify the LHS (left hand side) of the following constraint:

2 X1 + 5 X2 >= 100

Correct!

⦿ 2 X1 + 5 X2

○ 2 X1

○ >=

○ 100

问题 6   0 / 1 pts

In spreadsheet design, the ability to trace the steps followed to generate the different outputs from the model in order to understand the model and verify results is referred as

rrect Answer

○ auditability

u Answered

◉ verification

○ validation

○ reliability

问题 7   1 / 1 pts

Which of the following optimization tools is prepackaged with Excel?

○ @Risk

Correct!

◉ Solver

○ Lindo

○ None of these

问题 8   **0 / 1 pts**

What of the following situations does not require the LP problem to be revised?

○ LP infeasibility

u Answered

◉ LP unboundedness

rrect Answer

○ Multiple optimal solutions

○ Non-linear constraints

问题 9   **1 / 1 pts**

The shadow price of non-binding constraint is

○ less than zero

Correct!

◉ zero

○ greater than zero

○ any value

问题 10   **1 / 1 pts**

What happens to the objective function value when the RHS of a non binding constraint increases within the allowable increase?

Correct!

◉ The objective value stays the same.

○ The objective value will increase.

○ The objective value will decrease.

○ It is not possible to say. The problem needs to be resolved.

Quiz Score: **6** out of 10