Quiz 2

1/1 question correct

Excellent!

Retake

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✔ 1.

Consider the following linear program.

$\min 10x_1 + 5x_2 + 4x_3$

s.t.

(Constraint 1) $x_1 + x_2 + x_3 \geq 10$

(Constraint 2) $x_1 - x_3 \geq 2$

(Constraint 3) $-5x_1 + x_2 - 2x_3 \geq 4$

(Constraint 4) $6x_1 - x_2 + x_3 \geq 8$

(Constraint 5,6,7) $x_1, x_2, x_3 \geq 0$

Consider the following assignments.

Assignment 1: $x_1 = 100, x_2 = 550, x_3 = 2$, of value 3758.

Assignment 2: $x_1 = 12, x_2 = 64, x_3 = 0$, of value 440.

Assignment 3: $x_1 = 10, x_2 = 5, x_3 = 1$, of value 129.

Pick all the correct statements.

☐ 440 is an upper bound on the optimal value of the dual of the LP.

Well done!

☐ 3758 is an upper bound on the optimal value of the dual of the LP.

Well done!

☐ 129 is an upper bound on the optimal value of the dual of the LP.

Well done!

☐ The optimal value of the LP is 129.

Well done!