Linear Programming · Partner Check 2

A

Name: _____ Partner's name: _____ Date: _____

Directions: Work alone on your own problems. Partner B has different problems with the same answers. After each problem, compare answers; if they differ, find the mistake together.
Answer conventions: sets in roster form with elements in increasing order, ∅ for the empty set; truth columns as T/F strings in standard row order (TT, TF, FT, FF; with r: TTT, TTF, ..., FFF); fractions in lowest terms; ordered pairs as (x, y).

1

At (4, 3), how much slack does $1x + 4y \le 33$ have?

Answer: _____ Match? ☐ Yes ☐ No

2

Evaluate $P = 9x + 5y$ at (2, 1).

Answer: _____ Match? ☐ Yes ☐ No

3

Evaluate $P = 6x + 7y$ at (7, 1).

Answer: _____ Match? ☐ Yes ☐ No

4

Find the corner where $2x + 1y = 17$ meets $2x + 3y = 27$.

Answer: _____ Match? ☐ Yes ☐ No

5

Find the corner where $1x + 2y = 7$ meets $3x + 3y = 12$.

Answer: _____ Match? ☐ Yes ☐ No

6

Maximize $P = 5x + 4y$ subject to $x + y \le 8$, $x + y \le 18$, $x, y \ge 0$. Give the maximum value.

Answer: _____ Match? ☐ Yes ☐ No

Linear Programming · Partner Check 2

B

Name: _____ Partner's name: _____ Date: _____

Directions: Work alone on your own problems. Partner A has different problems with the same answers. After each problem, compare answers; if they differ, find the mistake together.
Answer conventions: sets in roster form with elements in increasing order, ∅ for the empty set; truth columns as T/F strings in standard row order (TT, TF, FT, FF; with r: TTT, TTF, ..., FFF); fractions in lowest terms; ordered pairs as (x, y).

1

At (2, 4), how much slack does $2x + 3y \le 33$ have?

Answer: _____ Match? ☐ Yes ☐ No

2

Evaluate $P = 1x + 5y$ at (8, 3).

Answer: _____ Match? ☐ Yes ☐ No

3

Evaluate $P = 6x + 5y$ at (4, 5).

Answer: _____ Match? ☐ Yes ☐ No

4

Find the corner where $2x + 3y = 27$ meets $2x + 2y = 22$.

Answer: _____ Match? ☐ Yes ☐ No

5

Find the corner where $2x + 3y = 11$ meets $1x + 1y = 4$.

Answer: _____ Match? ☐ Yes ☐ No

6

Maximize $P = 5x + 5y$ subject to $3x + 2y \le 17$, $3x + y \le 8$, $x, y \ge 0$. Give the maximum value.

Answer: _____ Match? ☐ Yes ☐ No

Linear Programming · Partner Check 2

A

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Directions: Work alone on your own problems. Partner B has different problems with the same answers. After each problem, compare answers; if they differ, find the mistake together.
Answer conventions: sets in roster form with elements in increasing order, ∅ for the empty set; truth columns as T/F strings in standard row order (TT, TF, FT, FF; with r: TTT, TTF, ..., FFF); fractions in lowest terms; ordered pairs as (x, y).

1

Find the corner where $3x + 2y = 11$ meets $3x + 3y = 12$.

Answer: _____ Match? ☐ Yes ☐ No

2

Maximize $P = 4x + 3y$ subject to $2x + 2y \le 6$, $x + 2y \le 10$, $x, y \ge 0$. Give the maximum value.

Answer: _____ Match? ☐ Yes ☐ No

3

Find the corner where $3x + 1y = 24$ meets $1x + 3y = 24$.

Answer: _____ Match? ☐ Yes ☐ No

4

At $(1, 4)$, how much slack does $4x + 2y \le 39$ have?

Answer: _____ Match? ☐ Yes ☐ No

5

Evaluate $P = 4x + 5y$ at $(1, 3)$.

Answer: _____ Match? ☐ Yes ☐ No

6

Evaluate $P = 5x + 9y$ at $(8, 2)$.

Answer: _____ Match? ☐ Yes ☐ No

Linear Programming · Partner Check 2

B

Name: _____ Partner's name: _____ Date: _____

Directions: Work alone on your own problems. Partner A has different problems with the same answers. After each problem, compare answers; if they differ, find the mistake together.
Answer conventions: sets in roster form with elements in increasing order, ∅ for the empty set; truth columns as T/F strings in standard row order (TT, TF, FT, FF; with r: TTT, TTF, ..., FFF); fractions in lowest terms; ordered pairs as (x, y).

1

Find the corner where $2x + 2y = 8$ meets $1x + 2y = 5$.

Answer: _____ Match? ☐ Yes ☐ No

2

Maximize $P = 2x + 3y$ subject to $x + 3y \le 6$, $x + 2y \le 7$, $x, y \ge 0$. Give the maximum value.

Answer: _____ Match? ☐ Yes ☐ No

3

Find the corner where $2x + 3y = 30$ meets $1x + 3y = 24$.

Answer: _____ Match? ☐ Yes ☐ No

4

At $(0, 2)$, how much slack does $4x + 4y \le 35$ have?

Answer: _____ Match? ☐ Yes ☐ No

5

Evaluate $P = 7x + 1y$ at $(2, 5)$.

Answer: _____ Match? ☐ Yes ☐ No

6

Evaluate $P = 4x + 6y$ at $(4, 7)$.

Answer: _____ Match? ☐ Yes ☐ No

Linear Programming · Partner Check 2

A

Name: Partner's name: Date:

Directions: Work alone on your own problems. Partner B has different problems with the same answers. After each problem, compare answers; if they differ, find the mistake together.
Answer conventions: sets in roster form with elements in increasing order, ∅ for the empty set; truth columns as T/F strings in standard row order (TT, TF, FT, FF; with r: TTT, TTF, ..., FFF); fractions in lowest terms; ordered pairs as (x, y).

1

Evaluate P = 4x + 2y at (5, 7).

Answer: _____ Match? ☐ Yes ☐ No

2

Find the corner where 3x + 2y = 11 meets 1x + 3y = 13.

Answer: _____ Match? ☐ Yes ☐ No

3

Evaluate P = 3x + 7y at (2, 6).

Answer: _____ Match? ☐ Yes ☐ No

4

Maximize P = 4x + 5y subject to x + 2y ≤ 7, 2x + y ≤ 13, x, y ≥ 0. Give the maximum value.

Answer: _____ Match? ☐ Yes ☐ No

5

At (3, 2), how much slack does 2x + 2y ≤ 40 have?

Answer: _____ Match? ☐ Yes ☐ No

6

Find the corner where 3x + 1y = 23 meets 2x + 2y = 22.

Answer: _____ Match? ☐ Yes ☐ No

Linear Programming · Partner Check 2

B

Name: _____ Partner's name: _____ Date: _____

Directions: Work alone on your own problems. Partner A has different problems with the same answers. After each problem, compare answers; if they differ, find the mistake together.
Answer conventions: sets in roster form with elements in increasing order, ∅ for the empty set; truth columns as T/F strings in standard row order (TT, TF, FT, FF; with r: TTT, TTF, ..., FFF); fractions in lowest terms; ordered pairs as (x, y).

1

Evaluate P = 7x + 1y at (4, 6).

Answer: _____ Match? ☐ Yes ☐ No

2

Find the corner where 3x + 1y = 7 meets 2x + 3y = 14.

Answer: _____ Match? ☐ Yes ☐ No

3

Evaluate P = 1x + 6y at (6, 7).

Answer: _____ Match? ☐ Yes ☐ No

4

Maximize P = 5x + 4y subject to 3x + 3y ≤ 18, 3x + 2y ≤ 15, x, y ≥ 0. Give the maximum value.

Answer: _____ Match? ☐ Yes ☐ No

5

At (2, 2), how much slack does 2x + 3y ≤ 40 have?

Answer: _____ Match? ☐ Yes ☐ No

6

Find the corner where 3x + 1y = 23 meets 1x + 1y = 11.

Answer: _____ Match? ☐ Yes ☐ No