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Lecture 2

Lecture questions due Sep 20, 2016 at 19:30 IST

**Recitation 2****Problem Set 2**

Homework due Sep 20, 2016 at 19:30 IST



Week 2 > Lecture 2 > Convex Sets Exercise



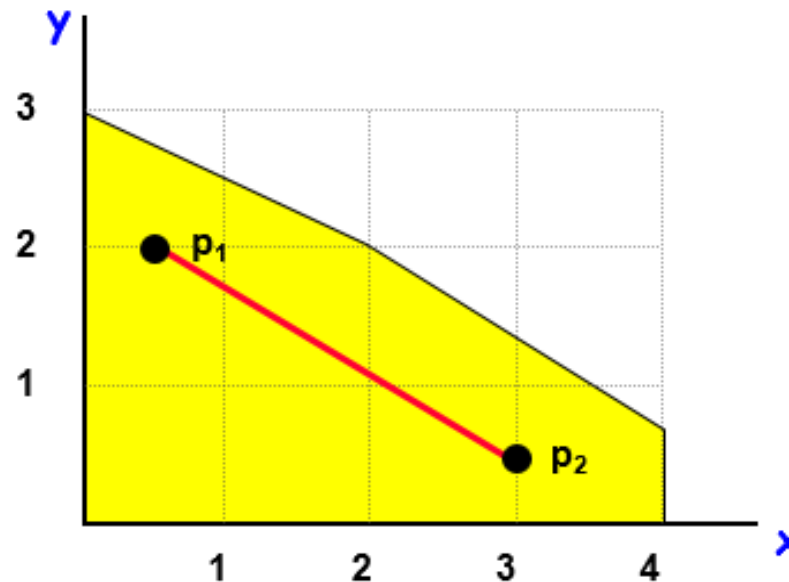
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Convex Combinations

(1/1 point)

In the feasible region below, $p_1 = (0.5, 2.0)$ and $p_2 = (3.0, 0.5)$. The point $(2, 1.1)$ is on the line segment joining p_1 and p_2 . Thus $(2, 1.1)$ can be expressed as a "convex combination" of the points p_1 and p_2 . That is, there is a value q such that $(1 - q) \times p_1 + q \times p_2 = (2, 1.1)$.

Find the value of q . Express your answer using decimals rather than fractions.



✓ Answer: 0.6

EXPLANATION

Solution

$$q = 0.6$$

$p_q = (2, 1.1)$, which can only be achieved if $q = 0.6, 1 - q = 0.4$

You have used 1 of 2 submissions

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