Distances between points

Examples

**Find the distance between**

and

and

and

Test Your Understanding

**Find the distance between:**

and

and

and

**Area of Shapes**

Example 1

The diagram shows two lines with equations

and , which intersect at the point .

a)Determine the coordinates of .

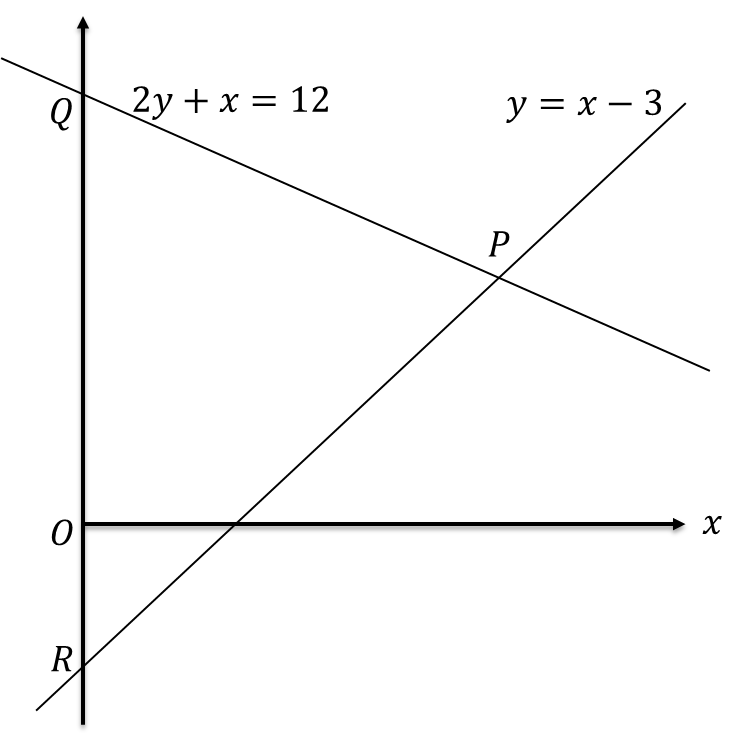
b) The line intersects the -axis at the point . Determine the area of the triangle .

When

Example 2

a)Determine the length of

b) Determine the area .

**Test Your Understanding:**

a) Determine the coordinate of .

b) Determine the area of .

c) Determine the length **.**

*Extension*

*[MAT 2001 1C]*

The shortest distance from the origin to the line is what?

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