# Practical Works

Consider the following equations:

1. $u_{xx} - 4u_{xy} + 4u_{yy} = \cos(2x + y)$

2. $3u_{xx} + 10u_{xy} + 3u_{yy} = 0$

For those two equations, determine:
   a. Their types
   b. Their characteristics,
   c. Canonical forms, and
   d. General solutions.

Then draw item b and d using MAPLE.

Submitted your works to the assistant.

You may have additional work (for additional score) by doing the same above instruction for the following equation:

$$u_{xx} + 4u_{xy} + 4u_{yy} = 0$$

Good luck n thanks