Hyperbolic

[MTH422] Find the characteristics of \(u_{xx}-x^2yu_{yy}=0\)
\(x^2\pm4\sqrt{y}\)

[MTH422] Which type of equation is \(u_{xx}+2yu_{xy}+xu_{yy}=0\)n
Hyperbolic

[MTH422] Which of the following shows that the following PDE is elliptic
\(3u_{xx}+2u_{xy}+xu_{y}=0\)n
\(b^2-ac=-14<0\)

[MTH422] Which type of equation is
\(u_{xx}+u_{xy}+5u_{yx}+u_{yy}+2u_{yz}+u_{zz}=0\)n
Hyperbolic

[MTH422] Which type of equation is
\(u_{xx}+u_{xy}+5u_{yx}+u_{yy}+2u_{yz}+u_{zz}=0\)n
Hyperbolic

[MTH422] Find the characteristics of \(4u_{xx}-12u_{xy}+9u_{yy}-2u_{x}+u=0\)
\(2y-3x=const\)

[MTH422] Which of the following shows that the following PDE is parabolic
\(u_{xx}+yu_{yy}=0\)n
for y=0

[MTH422] Which of the following shows that the following PDE is hyperbolic
\(u_{xx}+yu_{yy}=0\)n
for y<0

[MTH422] Which of the following shows that the following PDE is elliptic
\(u_{xx}+yu_{yy}=0\)n
for y>0