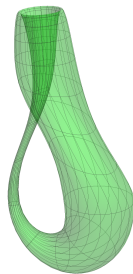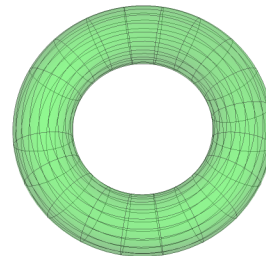# Remarkable surfaces

Name _____   **Date** _____

Try to remember names of remarkable surfaces in space. Then answer the questions:

a) is a surface orientable?

b) is it possible to glue a surface of such type from a flat shape?

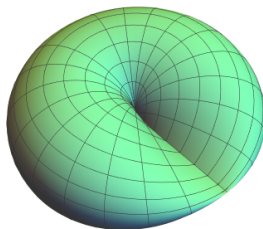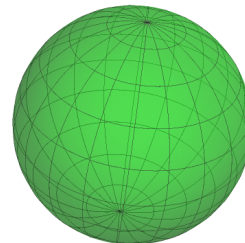c) is it possible to find a closed curve on the surface which cannot be contracted to point?

(1)

(2)

(3)

(4)

(5)

Answers

Try to remember names of remarkable surfaces in space. Then answer the questions:

a) is a surface orientable?

b) is it possible to glue a surface of such type from a flat shape?

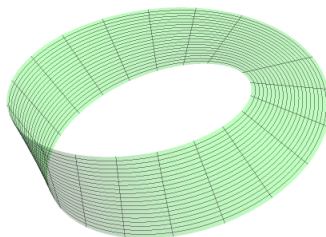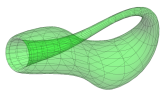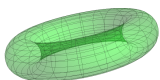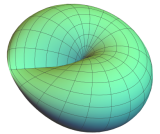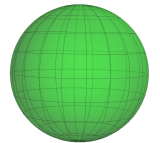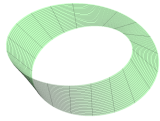c) is it possible to find a closed curve on the surface which cannot be contracted to point?

(1) Klein bottle   Answers: No, No, Yes

(2) Torus   Answers: Yes, Yes, Yes

(3) Projective plane   Answers: No, No, Yes

(4) Sphere   Answers: Yes, No, No

(5) Möbius ring   Answers: No, No, Yes