MATH 2551 Multivariable Calculus: Divergence theorem

1. What is the Divergence theorem?

A. It is a theorem that allows one to calculate the divergence of a vector field at a point.
B. It is a theorem that allows one to calculate the curl of a vector field at a point.
C. It is a theorem that allows one to calculate the gradient of a vector field at a point.
D. It is a theorem that allows one to calculate the divergence of a vector field over a closed surface.

2. What is the Divergence theorem used for?

A. It is used to calculate the divergence of a vector field at a point.
B. It is used to calculate the curl of a vector field at a point.
C. It is used to calculate the gradient of a vector field at a point.
D. It is used to calculate the divergence of a vector field over a closed surface.

3. How is the Divergence theorem applied?

A. It is applied by calculating the divergence of a vector field at a point.
B. It is applied by calculating the curl of a vector field at a point.
C. It is applied by calculating the gradient of a vector field at a point.
D. It is applied by calculating the divergence of a vector field over a closed surface.

4. What is the result of the Divergence theorem?

A. The result is the divergence of a vector field at a point.
B. The result is the curl of a vector field at a point.
C. The result is the gradient of a vector field at a point.
D. The result is the divergence of a vector field over a closed surface.

Answer Key: 1. D, 2. D, 3. D, 4. D