Section 16.4 - 16.5 Review

- Section 16.4 - Green's Theorem

  Positive Orientation —

  Green's Theorem   C:

  $\qquad\qquad\qquad$ D =

  $\qquad\qquad\qquad$ P, Q

  Notation:

  ✱ Green's Theorem Extends:

  Ex. Compute $\int_C \vec{F} \cdot d\vec{r}$, $\vec{F} = \langle y - \cos y, x \sin y \rangle$ C: $(x-3)^2 + (y+4)^2 = 2^2$ clockwise

- Section 16.5 - Curl and Divergence

  $\vec{F} = \langle P, Q, R \rangle$

  Curl $\vec{F}$ =
    ✱ Rate of change in

  div $\vec{F}$ =
  $\qquad\qquad\qquad\qquad\qquad$ ✱ Rate of change in

  Theorems   •

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  Ex. Find Curl and divergence of $\vec{F} = \langle x y e^z, 0, y z e^x \rangle$