

$$d \times f = \overrightarrow{df}$$

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$$df - fd = \gamma^\mu \partial_\mu f - f \gamma^\mu \partial_\mu = \gamma^\mu \underbrace{\partial_\mu f} + \underbrace{\gamma^\mu f}_{\partial_\mu} - f \gamma^\mu \partial_\mu = \gamma^\mu \partial_\mu f = dx^\mu \partial_\mu f = df$$

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