

15.1

- #2 a) I constant vector field
b) II points away from the origin

#12 False

#14 False

#18 $\operatorname{div}\vec{F} = z^3 + 8y^3x^2 + 10zy$, $\operatorname{curl}\vec{F} = 5z^2i + 3z^2xj + 4xy^4k$

#24 $-xy^2$

#28 $-2xi + 2yj - 3k$