

# Physics 1214 - General Physics II

Quiz #3 - 2013.01.23

Name: \_\_\_\_\_

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1. If a positive charge moves in the direction of an electric field  $\vec{E}$ , does the field do positive or negative work on the charge? Also, does the electric potential energy  $U$  increase or decrease for this scenario?

2. What happens if we replace the positive charge in problem 1 with a negative charge?

3. What is the relationship between electric potential energy  $U$  and electric potential  $V$ ?