

Quantitative Problems
(Given, Find, Solution REQUIRED)

1. A charge $q_1 = 3 \times 10^{-5}$ [C] is placed 0.2 [m] from a second charge q_2 . The force that acts on the q_1 is 3×10^{-2} [N]. What is the value of the charge q_2 ?

Qualitative Problems
Short answer (in a complete sentence) or a fully labeled graph
(Given, Find, Solution NOT required)

2. If we have the knowledge of how to “make” things (techne), is there a need to know “why” it works (episteme)?
3. Give an example of how an understanding of “episteme” and/or “techne” has influenced “praxis”.
4. What is the difference between “Special Relativity” and “General Relativity”?
5. What is the difference between “inductive” and “deductive” reasoning? Which type of reasoning did Einstein use in developing his theories of relativity?
6. What was James Clerk Maxwell’s contribution to physics?
7. What was Niels Bohr’s contribution to physics?
8. Was Einstein a supporter of Quantum Mechanics?

HW Set 6 Answers

1. 4.44×10^{-9} [C]

2-8. Will discuss in class