

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

Period: \_\_\_\_\_ Subject: \_\_\_\_\_

Date: \_\_\_\_\_

## Worksheet - Coulomb's Law

1. A negative charge of  $-2.0\text{ C}$  and a positive charge of  $3.0\text{ C}$  are separated by  $80\text{ m}$ . What is the force between the two charges?
2. A negative charge of  $-0.0005\text{ C}$  exerts an attractive force of  $9.0\text{ N}$  on a second charge that is  $10\text{ m}$  away. What is the magnitude of the second charge?
3. Two negative charges that are both  $-3.0\text{ C}$  push each other apart with a force of  $19.2\text{ N}$ . How far apart are the two charges?

4. A negative charge of  $-4.0 \times 10^{-5} \text{ C}$  and a positive charge of  $7.0 \times 10^{-5} \text{ C}$  are separated by 0.15 m. What is the force between the two charges?
5. A negative charge of  $-8.0 \times 10^{-6} \text{ C}$  exerts an attractive force of 12 N on a second charge that is 0.050 m away. What is the magnitude of the second charge?
6. Two negative charges that are both  $-5.0 \times 10^{-5} \text{ C}$  push each other apart with a force of 15 N. How far apart are the two charges?