

## Coulomb's worksheet (use sig figs)

1. What is the electrical force acting on two substances if the charge for each is  $4.0 \times 10^{-7} \text{ C}$  and they are placed 2.0 cm apart?
2. What is the electrical force acting on two substances if the charge for each is  $5.0 \times 10^{-8} \text{ C}$  and they are placed 1.50 cm apart?
3. The electrical force acting on 2 spheres with a charge of  $5.67 \times 10^{-4} \text{ C}$  is  $6.60 \times 10^6 \text{ N}$ . What is the distance of the two spheres?
4. The electrical force acting on 2 spheres with a charge of  $7.6 \times 10^{-4} \text{ C}$  is  $5 \times 10^3 \text{ N}$ . What is the distance of the two spheres?
5. The charge of a sphere is  $5.5 \times 10^{-4} \text{ C}$ . The electrical force of the 2 spheres is  $7.00 \times 10^3 \text{ N}$ . The distance between the 2 spheres is 6.0 cm. What is the charge of the other sphere?



11. The charge of a sphere is  $5.55 \times 10^{-5} \text{C}$ . The electrical force of the 2 spheres is  $4.5 \times 10^3 \text{N}$ . The distance between the 2 spheres is 9.5 m. What is the charge of the other sphere?
12. The electrical force acting on 2 spheres with a charge of  $6.76 \times 10^{-5} \text{C}$  is  $3.60 \times 10^5 \text{N}$ . What is the distance of the two spheres?
13. The charge of a sphere is  $2.5 \times 10^{-4} \text{C}$ . The electrical force of the 2 spheres is  $3.00 \times 10^3 \text{N}$ . The distance between the 2 spheres is 8.05 cm. What is the charge of the other sphere?
14. The electrical force acting on 2 spheres with a charge of  $6 \times 10^{-4} \text{C}$  is  $6 \times 10^5 \text{N}$ . What is the distance of the two spheres?
15. The charge of a sphere is  $5.5 \times 10^{-2} \text{C}$ . The electrical force of the 2 spheres is  $6.00 \times 10^6 \text{N}$ . The distance between the 2 spheres is 7.0 m. What is the charge of the other sphere?