## Coulomb's worksheet (use sig figs)

1. What is the electrical force acting on two substances if the charge for each is $4.0 \times 10^{-7} \mathrm{C}$ and they are placed 2.0 cm apart?
2. What is the electrical force acting on two substances if the charge for each is $5.0 \times 10^{-8} \mathrm{C}$ and they are placed 1.50 cm apart?
3. The electrical force acting on 2 spheres with a charge of $5.67 \times 10^{-4} \mathrm{C}$ is $6.60 \times 10^{6} \mathrm{~N}$. What is the distance of the two spheres?
4. The electrical force acting on 2 spheres with a charge of $7.6 \times 10^{-4} \mathrm{C}$ is $5 \times 10^{3} \mathrm{~N}$. What is the distance of the two spheres?
5. The charge of a sphere is $5.5 \times 10^{-4} \mathrm{C}$. The electrical force of the 2 spheres is 7.00 $x 10^{3} \mathrm{~N}$. The distance between the 2 spheres is 6.0 cm . What is the charge of the other sphere?
6. The charge of a sphere is $9.555 \times 10^{-5} \mathrm{C}$. The electrical force of the 2 spheres is $9.00 \times 10^{3} \mathrm{~N}$. The distance between the 2 spheres is 9.5 m . What is the charge of the other sphere?
7. What is the electrical force acting on two substances if the charge for each is $5.55 \times 10^{-7} \mathrm{C}$ and is placed 2.00 cm apart?
8. The electrical force acting on 2 spheres with a charge of $4.7 \times 10^{-5} \mathrm{C}$ is $3.60 \times 10^{4} \mathrm{~N}$. What is the distance of the two spheres?
9. The charge of a sphere is $9.5 \times 10^{-4} \mathrm{C}$. The electrical force of the 2 spheres is 8.00 $\mathrm{x} 10^{3} \mathrm{~N}$. The distance between the 2 spheres is 8.00 cm . What is the charge of the other sphere?
10. The charge of a sphere is $9.55 \times 10^{-8} \mathrm{C}$. The electrical force of the 2 spheres is 9.00 $\times 10^{6} \mathrm{~N}$. The distance between the 2 spheres is 9.0 m . What is the charge of the other sphere?
11. The charge of a sphere is $5.55 \times 10^{-5} \mathrm{C}$. The electrical force of the 2 spheres is 4.5 $x 10^{3} \mathrm{~N}$. 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 $6.76 \times 10^{-5} \mathrm{C}$ is $3.60 \times 10^{5} \mathrm{~N}$. What is the distance of the two spheres?
13. The charge of a sphere is $2.5 \times 10^{-4} \mathrm{C}$. The electrical force of the 2 spheres is 3.00 $\mathrm{x} 10^{3} \mathrm{~N}$. 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 $6 \times 10^{-4} \mathrm{C}$ is $6 \times 10^{5} \mathrm{~N}$. What is the distance of the two spheres?
15. The charge of a sphere is $5.5 \times 10^{-2} \mathrm{C}$. The electrical force of the 2 spheres is 6.00 $\times 10^{6} \mathrm{~N}$. The distance between the 2 spheres is 7.0 m . What is the charge of the other sphere?
