

**Unit 20 homework after session 1**

- Read section 23-10 of chapter 23 and chapter 24 up to section 24-4 in the text book *Understanding Physics*.
- Work textbook problems 23-70 and 23-76.

**Unit 20 homework after session 2**

- Read the rest of chapter 24 in the text book *Understanding Physics*.
- Answer supplemental problems SP20-1, 2, and 3 below.

**SP20-1)** If the electric field in a region of space is zero, can you conclude that there are no electric charges in that region? Explain.

**SP20-2)** If there are fewer electric field lines leaving a Gaussian surface than there are entering the surface, what can you conclude about the net charge enclosed by that surface.

**SP20-3)** Does Gauss' law require that all the conduction electrons in an insulated conductor reside on the surface?

**Unit 20 homework after session 3**

- Work textbook problems 24-5, 24-15, 24-24, 24-28, 24-34.

**All Unit 20 homework problems and the unit 20 activity guide are due on the first day of Unit 21.**