Attendance Quiz for Lecture $18\frac{1}{2}$

1. A bat and a ball cost $1.10. The bat costs one dollar more than the ball. How much does the ball cost?

Ans.: 5 cents. The "obvious", wrong, answer. is 10 cents, but then the bat costs one dollar, and the difference is 90 cents. To make the difference one dollar, one has to make the bat 5 cents more expensive, and the ball 5 cents cheaper. (Many people did it correctly, using algebra, but it is against the 'spirit' of the problem, that is better done mentally.)

2. If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100 machines to make 100 widgets?

Ans. 5 minutes. It takes one machine 5 minutes to make one widget, so if the number of widgets is the same as the number of machines, it is always 5 minutes.

3. In a lake, there is patch of lily pads. Every day, the patch doubles in size. It if takes 48 days for the patch to cover the entire lake, how long would it take for the patch to cover half the lake?

Ans. 47 days. It doubles from one day to the next, so it halves from one day to the previous day.

Comments: The correlation between doing well in this attendance quiz and the coursework is roughly zero. Some really good students did terribly, and some students who struggle with the material did brilliantly.