6. A certain CCD requires a "fat-zero" or "pre-flash" of 400 electrons. If it has a readout noise of 15 electrons what will be the final noise when the pre-flash is used?

Noise photons originating from the pre-flash can be calculated as the square root of the total number of pre-flash electrons.

Hence, readout noise is

N_read = sqrt(15^2 + 400) = sqrt(625) = 25