# Lecture Summaries

## l5

\* \*\*Average of first 40 natural numbers:\*\* The average of the first 40 natural numbers is 20.5.  
  
\* \*\*Number sequence:\*\* The next number in the sequence 1, 5, 14, 30, ?, 91 is 55.  
  
\* \*\*Village resource shortage:\*\* At least 42% of houses in Gurgaon lack at least one of tubelights, bulbs, or fans.  
  
\* \*\*Coal consumption:\*\* 8 engines running 13 hours a day require 26 metric tonnes of coal, given the specified consumption rates.  
  
\* \*\*Alcohol percentage:\*\* Adding 5 liters of pure water to 15 liters of 20% alcohol solution results in a 15% alcohol solution.  
  
\* \*\*Page preview mode:\*\* In page preview mode, one cannot see all pages, only the current page, and the statement about graphics is false.  
  
\* \*\*Savings percentage:\*\* A savings of Rs. 2.50 on a Rs. 25 purchase represents approximately a 10% saving.  
  
\* \*\*Superheroes' distance:\*\* Liza and Tamar, running at 1 and 2 mps respectively in opposite directions, will be 10800 miles apart after 1 hour.  
  
\* \*\*Work efficiency:\*\* A worker who is twice as efficient as another, and who completes a task with the other worker in 18 days, will complete it alone in 27 days.  
  
\* \*\*Daal price reduction:\*\* To maintain the same expenditure with a 25% price increase in daal, the consumption must be reduced by 20%.