

- 1) Two numbers differ by 11. One-fourth of 6 more than the larger number is 3 more than one-third of the number that exceeds the smaller by 2. Find the numbers.
  
- 2) A prepared mixture of sand and cement contains 2 cu.ft. of cement and 5 cu.ft. of sand. A patching job calls for a mixture that is 25% cement. How much sand must be added to produce the required mixture?
  
- 3) One-third of a number plus three-quarters of the number exceeds the number itself by 3. Find the number.
  
- 4) We divide 36 into two parts such that one-third of the larger added to four-thirds of the smaller equals the larger. Find the parts.
  
- 5) How much water must be evaporated from 60 gallons of a 5% solution to raise it to a 20% solution?
  
- 6) A city dweller drove his car 60 miles into the country. He drove back to the city at a rate of 45 miles per hour. If the entire trip took 3 hours 20 minutes, at what rate of speed did the man drive into the country? (Assume he did not dilly-dally in the country.)