

- 1)
  - a) Convert the recurring decimal  $0.\dot{3}\dot{6}$  to a fraction in its simplest form.
  - b) Prove that the recurring decimal  $0.\dot{7}\dot{2} = \frac{8}{11}$
  
- 2)
  - a) Change  $\frac{4}{9}$  to a decimal.
  - b) Prove that the recurring decimal  $0.\dot{5}\dot{7} = \frac{19}{33}$
  
- 3)
  - a) Change  $\frac{3}{11}$  to a decimal.
  - b) Prove that the recurring decimal  $0.\dot{4}\dot{5} = \frac{15}{33}$
  
- 4)
  - a) Change  $\frac{1}{6}$  to a decimal.
  - b) Prove that the recurring decimal  $0.\dot{1}\dot{3}\dot{5} = \frac{5}{37}$
  
- 5)
  - a) Convert the recurring decimal  $0.\dot{2}\dot{6}\dot{1}$  to a fraction in its simplest form.
  - b) Prove that the recurring decimal  $0.2\dot{7} = \frac{5}{18}$
  
- 6)
  - a) Convert the recurring decimal  $5.\dot{2}$  to a fraction in its simplest form.
  - b) Prove that the recurring decimal  $0.1\dot{3}\dot{6} = \frac{3}{22}$