Text

Description automatically generated Diagram

Description automatically generated with medium confidence

A: after B   
Throughput = 1instruction/80ps \* 1000ps/1 nanoscond = 12.5 GIPS  
Delay: 340ps

B: Registers should be put after B and after D as they have the shortest times.  
Throughput = 1instruction/80ps \* 1000ps/1 nanoscond = 12.5 GIPS  
Delay: 360ps

C: After B C and D  
Throughput = 1instruction/80ps \* 1000ps/1 nanoscond = 12.5 GIPS  
Delay 380ps

The one in A

Text, letter

Description automatically generated

Text, letter

Description automatically generated

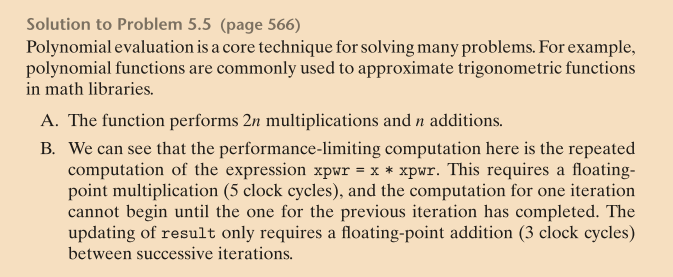
\*xp = \*xp + \*xp x = x + x

\*xp = \*xp - \*xp x = x + x – (x + x) = 0

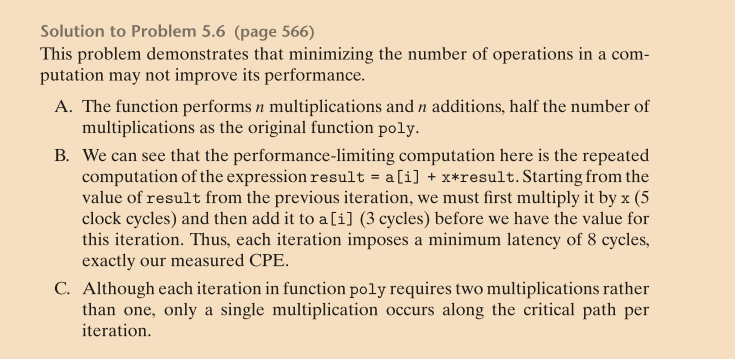
\*xp = \*xp - \*xp x = 0 - 0

Text, letter

Description automatically generated

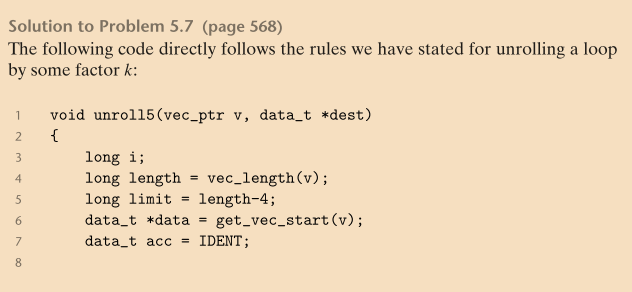
Text, letter

Description automatically generated

  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
  
Text, letter

Description automatically generatedText, letter

Description automatically generated

Text, letter

Description automatically generated

Table

Description automatically generated with medium confidence