**Activity 1a**

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|  | **1a** | A = [2 1 1;0 -3 4]  B = [3 -1 3;2 0 5]  A+B |
|  | **1b** | A = [1 2;3 0]  B = [1 3;0 -4]  3\*A - 2\*B |
|  | **1c** | A = [2 1 1;0 -3 4]  B = [3 -1 3;2 0 5]  5\*A - 2\*B |
|  | **2** | A = [1 2;3 0]  B = [2 -1;3 4]  C = [2 -2;1 3;4 -1]  C\*(A+B) |
|  | **3** | C\*A + C\*B |
|  | **4** | x = -1000:1000;  y1 = x.^2 + 5\*x + 3;  plot(x,y1,'r')  hold on  y2 = x.^3 + 4;  plot(x,y2,'b--')  hold off |
|  | **5** |  |
|  | **6a** | a6 = [1 32 8 85 4 1 3 1];  roots(a6) |
|  | **6b** | b6 = [3 -1 24 9 6 2];  roots(b6) |
|  | **6c** | c6 = [1 77 11 1];  roots(c6) |
|  | **7a** | a7 = conv(a6,b6) |
|  | **7b** | b7 = conv(a6,c6) |

**Activity 1b**

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|  | **Fibonacci** |  |
|  | **Palindrome** |  |