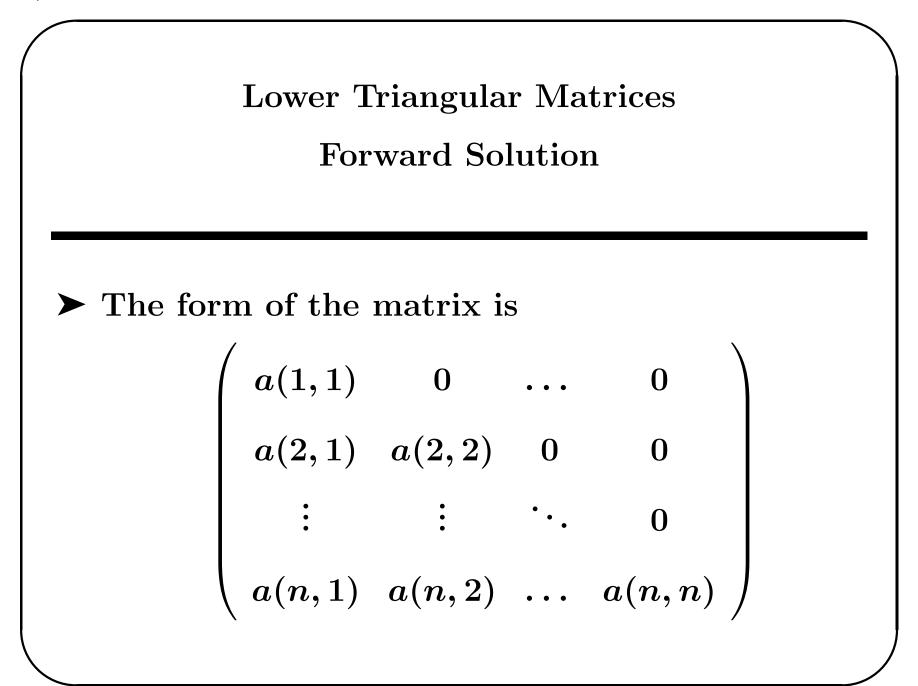
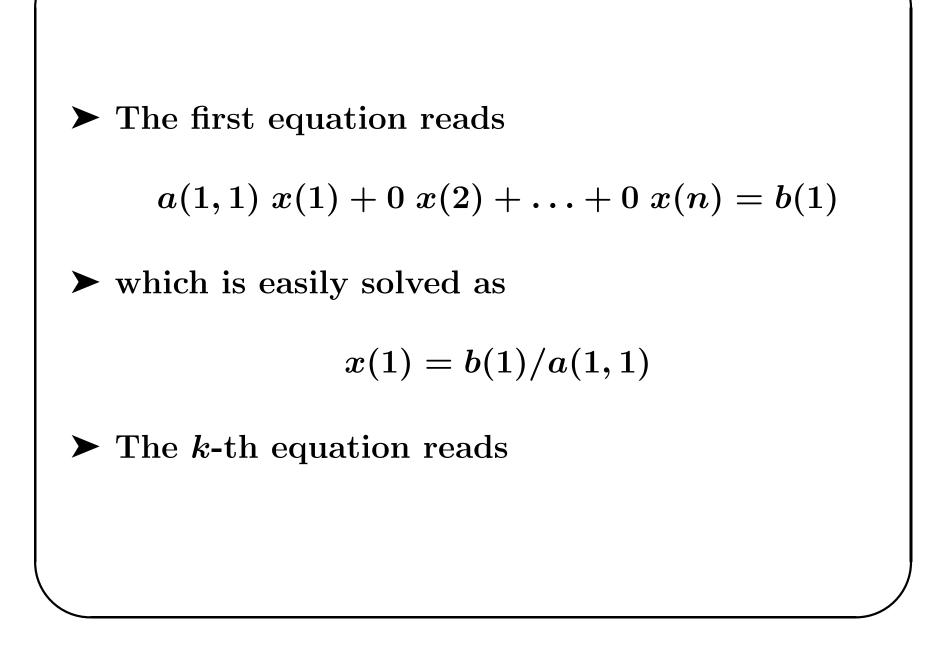


triangular form and a $n \times 1$ Matlab array b. Write a Matlab code segment to solve for the unknown x using the forward substitution procedure.



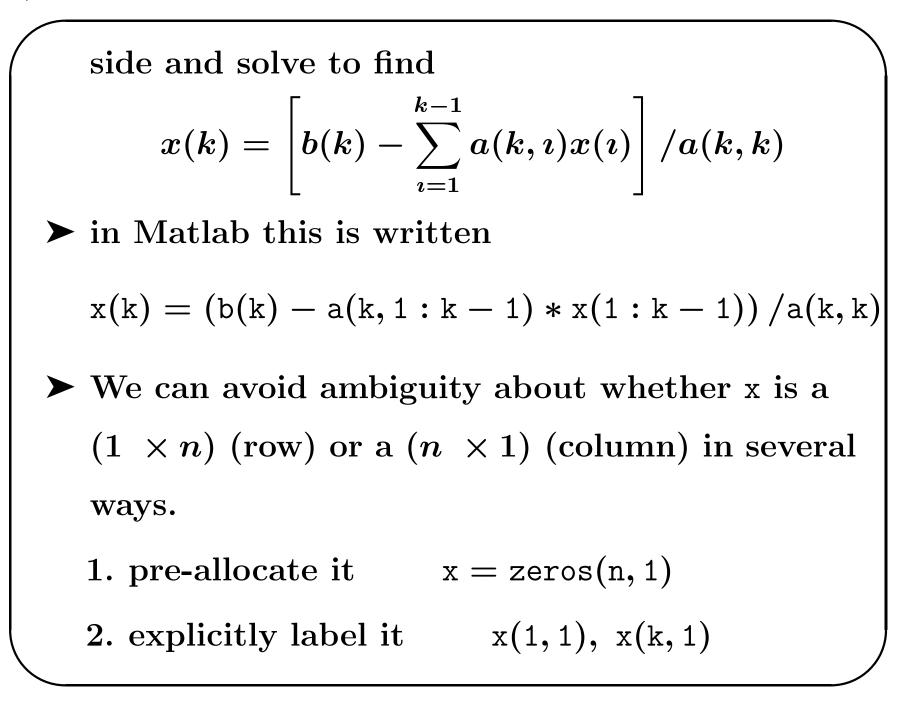


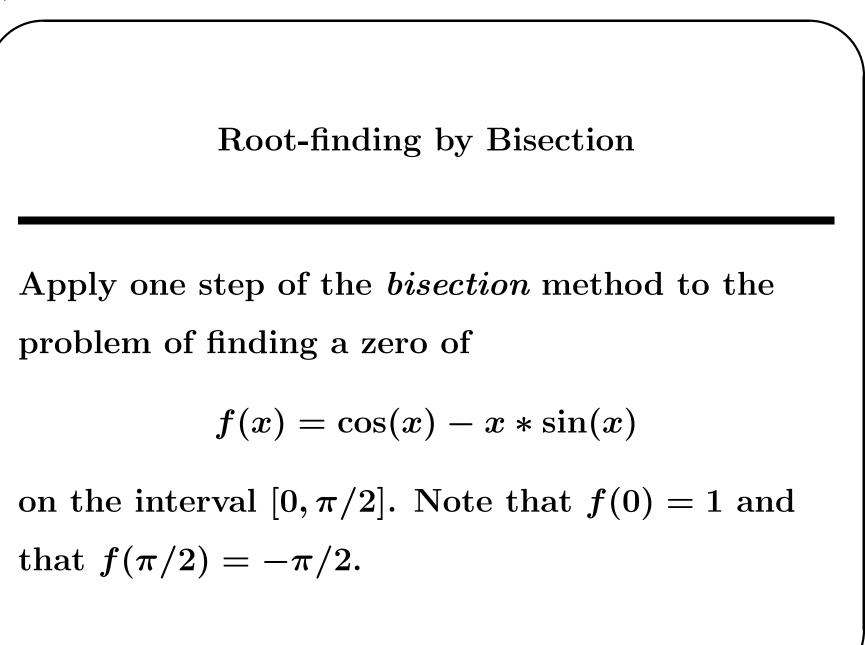
$$egin{aligned} a(k,1) \; x(1) + a(k,2) \; x(2) + \ldots \ &+ a(k,k) \; x(k) + 0 \; x(k+1) + \ldots \ &+ 0 \; x(n) = b(k) \end{aligned}$$

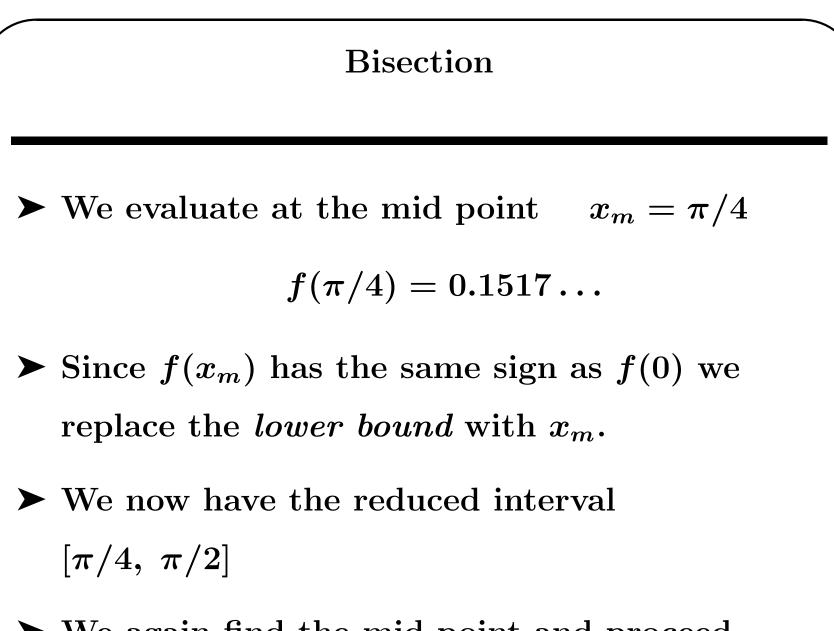
➤ In the forward solution procedure at this stage we have already solved for

$$x(1), \ x(2), \ldots, \ x(k-1)$$

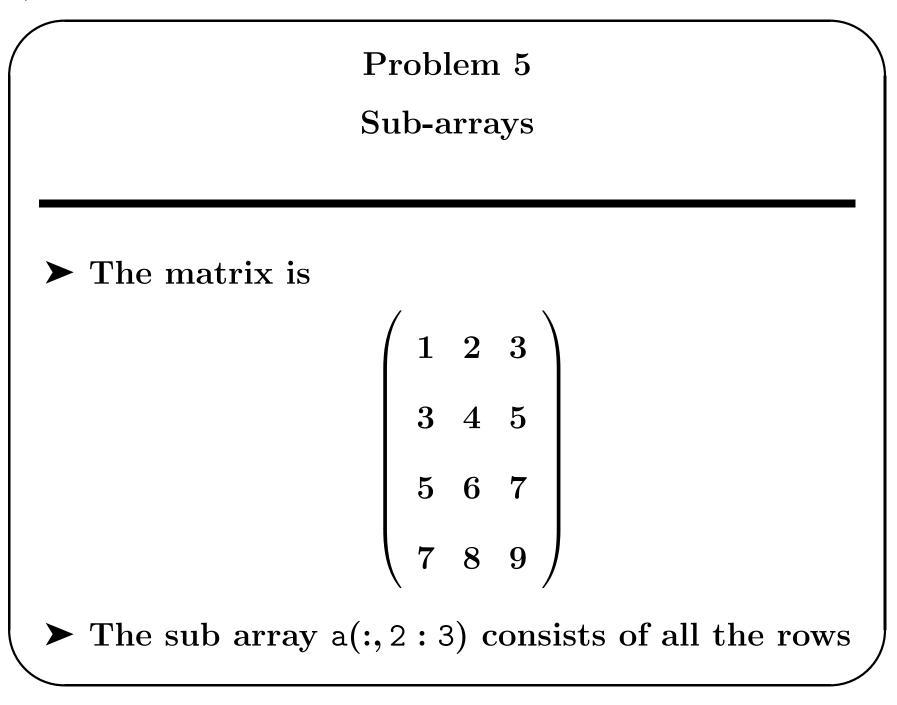
► Move the known quantities to the right hand

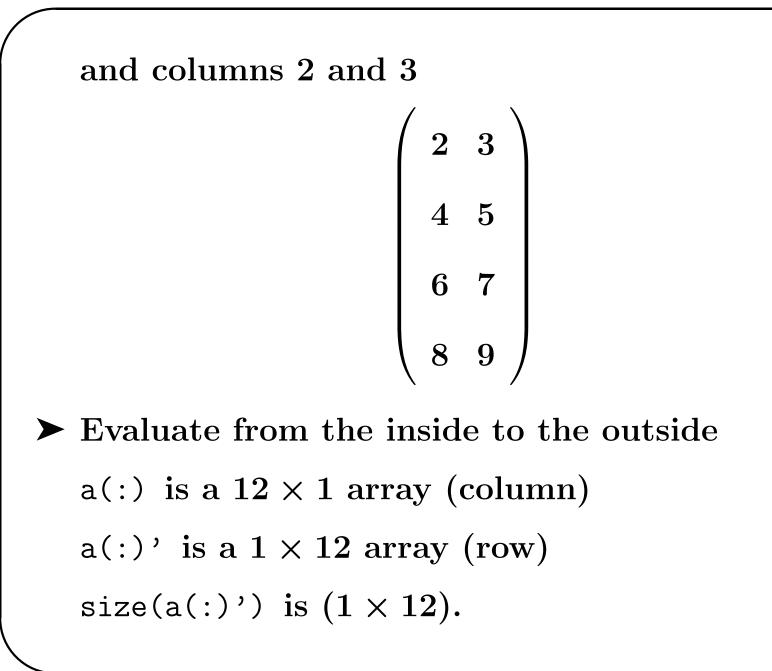






► We again find the mid-point and proceed.





```
    ➤ a(3, 2:4) denotes row 3 and columns 2
through 4
    Since the size of the array is (4 × 3) the
expression cannot be evaluated. It produces
an error.
```



Using the array *a* described in Question 5 examine each of the following statements. If the expression is not legal indicate an error. If the expression is legal indicate its *size*.

i)
$$a(:,3) > a(3,2:4)$$

```
ii) a + a(1,2)
```

iii) a(1,:) - a(2:4,1)'