

Figure 3 contains a subroutine that returns a value.

Figure 3

```

SUBROUTINE Times(a, b)
  c ← 0
  FOR i ← 1 TO 3
    d ← a * b
    c ← c + d
  END FOR
  RETURN c
ENDSUBROUTINE
    
```

a) Complete the trace table below when the subroutine call Times(7, 3) is made (you may not need all the rows in the table):

[3 marks]

a	b	c	d

b) A programmer mistakenly tries to shorten the subroutine in Figure 3 by replacing the lines:

```

d ← a * b
c ← c + d
    
```

With the line:

```

d ← c + a * b
    
```

Explain why this change is a mistake

[2 marks]

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.....

c) What value is returned by the subroutine call Times(p, 0) where p is any positive integer?

[1 mark]

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