

# Week 2, question 2.7

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## Abstract

The results for task 5 which deals with Python components.

## 1 Question 1

Here should be your answer etc. etc.  $B = \frac{1}{\pi\sqrt{a}}[0 + x_e \cdot \sqrt{a} \sqrt{\pi} \sqrt{\pi} - 0]$

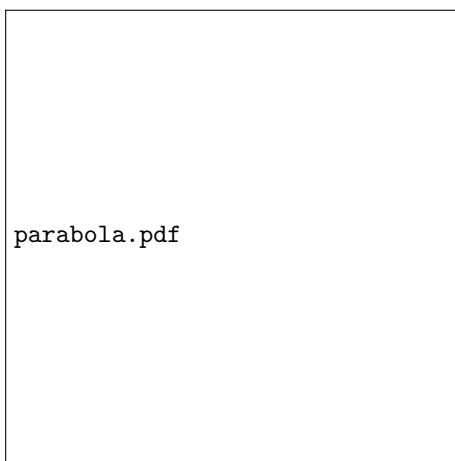


Figure 1: Example of a gaussian shaped source with fitted ellipse. The ellipse follows the contour for which the pixel values are half the maximum value. It has a major axis and a minor axis. The angle between the major axis and the x axis is the rotation angle  $\theta$  of the ellipse. The position angle  $\varphi$  is equal to  $90^\circ + \theta$ .

```
1 #!/usr/bin/env python
2 import numpy
3 import pyplot
4
5 x = numpy.arange( 3,15 , dtype='f' )
6 y = 2.0 * x + 3.0
7
8 pyplot.plot(x,y)
9 pyplot.savefig( 'plot.v1.png' )
10 pyplot.show()
```



Figure 2: *Fast Fourier transforms*