

Task 1

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February 17, 2026

Abstract

The results for task 5 which deals with Python components.

1 Question 1

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

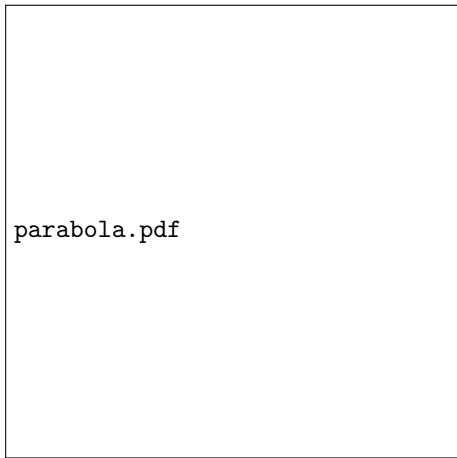


Figure 1: Example of a gaussian shaped source with fitted ellipse. The ellipse follows the contour for which the pixel values are half the maximum value. It has a major axis and a minor axis. The angle between the major axis and the x axis is the rotation angle θ of the ellipse. The position angle φ 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*