This sample exam refers to past exam questions from the Study Guide. The Study Guide is available from the website - <u>www.maths.uq.edu.au/courses/MATH1040</u>, or from Uni Copying Services. Note that the Study Guide contains worked solutions to most of the questions. Your exam has the same formulae at the end.

Part A

For each of the following 30 questions, enter the correct value of x into the corresponding box. There is no need to show any working. Each correct answer is worth 1 mark; each incorrect answer is worth 0 marks. (Hint: In each case, x is an integer between -6 and 6 inclusive.)

For practice questions, try:

- Questions 1 to 30 on Page 74 of your Study Guide.
- Questions 1 to 30 on Page 79 of your Study Guide.
- Questions 2 to 26 on Page 83 of your Study Guide.
- Questions 3 to 25 on Page 88 of your Study Guide.
- Questions 3 to 25 on Page 93 of your Study Guide.
- Questions 3 to 32 on Page 98 of your Study Guide, but not Questions 5-7, 21-24.
- Questions 3 to 23 on Page 104 of your Study Guide but not Questions 5-7, 17 or 18.
- Questions 3 to 20 on Page 110 of your Study Guide, but not Questions 5-7, 17 or 18.
- Questions 6 to 12 on Page 116 of your Study Guide, but not Question 8.

For each of the following multiple choice questions, **enter your answer into the corresponding box**. There is no need to show any working. Each correct answer is worth 1 mark; each incorrect answer is worth 0 marks.

For practice questions, try:

- Multiple choice Questions 1 to 8 on Pages 74 and 75 of your Study Guide.
- Multiple choice Questions 1, 3 to 7 on Pages 79 and 80 of your Study Guide.
- Multiple choice Questions 1 to 9 on Pages 83 and 84 of your Study Guide.
- Multiple choice Questions 1, 2, 6, 8 and 9 on Pages 88 and 89 of your Study Guide.
- Multiple choice Questions 1, 2, 4, 6 and 9 on Pages 93 and 94 of your Study Guide.
- Multiple choice Question 3 on Pages 98 of your Study Guide.
- Multiple choice Questions 1, 4, 9 and 10 on Pages 104 and 105 of your Study Guide.
- Multiple choice Questions 1, 4, 9-13 on Pages 110 and 111 of your Study Guide.
- Multiple choice Questions 1, 9 and 10 on Pages 116 and 117 of your Study Guide.

Part B

There will be a range of short answer questions on Chapters 1-5. For practice questions, try the following Part B questions:

- Mid-semester exam 2010 Questions 1-10
- Mid-semester exam 2009 Questions 1-11
- Mid-semester exam 2008 Questions 1-10
- Mid-semester exam 2007 Questions 1-12
- Mid-semester exam 2006 Questions 1-13
- Mid-semester exam 2005 Questions 1-6, 8-11
- Mid-semester exam 2004 Questions 1-4, 6, 7, 9, 12, 13, 15
- Mid-semester exam 2003 Questions 1, 2, 4, 6, 7, 8, 12, 13, 15

- Mid-semester exam 2002 Questions 1-6, 8, 12-16
- Final exam 2010 Question 8
- Final exam 2009 Questions 6-8, 11
- Final exam 2008 Questions 3-5, 10a
- Final exam 2007 Questions 3, 7, 8, 11
- Final exam 2006 Questions 3, 6, 7, 11
- Final exam 2005 Questions 4, 5,
- Final exam 2004 December Questions 1, 5, 6, 8
- Final exam 2004 June Questions 1, 5, 6, 8
- Final exam 2003 Questions 1, 5, 6, 8
- Final exam 2001 Questions 1, 5, 6

Some formulae

Distance between (x_1, y_1) and (x_2, y_2) :

Have you read Page 73 of the Study Guide? It gives some good ideas on how to approach the exam.