

Foundations of Mathematics and Pre-Calculus 10
2010 – 2011 Sample A
Provincial Examination — Answer Key

Cognitive Processes	Weightings	Question Types
Knowing	47%	54 = Multiple Choice (MC)
Applying	40%	6 = Numerical Response (NR)
Reasoning	13%	

Topics	Prescribed Learning Outcomes (PLOs)	Weightings
1. Measurement	A	25%
2. Algebra and Number	B	30%
3. Relations and Functions	C	45%

Part A: Multiple-Choice Questions (Calculator Not Permitted)

Question Number	Keyed Response	Cognitive Process	Mark	Topic	PLO	Question Type
1.	A	Applying	1	3	C6	MC
2.	D	Applying	1	3	C6	MC
3.	A	Applying	1	3	C7	MC
4.	B	Applying	1	3	C9	MC
5.	C	Knowing	1	3	C8	MC
6.	A	Knowing	1	2	B1	MC
7.	C	Knowing	1	2	B1, B2	MC
8.	B	Knowing	1	2	B2	MC
9.	A	Applying	1	2	B3	MC
10.	B	Knowing	1	2	B3	MC
11.	C	Knowing	1	1	A2	MC
12.	D	Applying	1	1	A2	MC

Part B: Multiple-Choice Questions (Calculator Permitted)

Question Number	Keyed Response	Cognitive Process	Mark	Topic	PLO	Question Type
13.	A	Applying	1	3	C1	MC
14.	A	Knowing	1	3	C1	MC
15.	B	Knowing	1	3	C2	MC
16.	A	Knowing	1	3	C3	MC
17.	B	Knowing	1	3, 1	C3, A1	MC
18.	D	Knowing	1	3	C3	MC
19.	B	Applying	1	3	C3	MC
20.	C	Reasoning	1	3	C3	MC

Question Number	Keyed Response	Cognitive Process	Mark	Topic	PLO	Question Type
21.	C	Applying	1	3	C4	MC
22.	C	Knowing	1	3	C5	MC
23.	B	Knowing	1	3	C5	MC
24.	B	Knowing	1	3	C5	MC
25.	D	Applying	1	3	C6	MC
26.	D	Applying	1	3	C7	MC
27.	D	Knowing	1	3	C7	MC
28.	A	Reasoning	1	3	C7	MC
29.	A	Reasoning	1	3	C7	MC
30.	D	Knowing	1	3	C9	MC
31.	A	Reasoning	1	3	C9	MC
32.	B	Knowing	1	2	B1	MC
33.	C	Reasoning	1	2, 1	B2, A4	MC
34.	A	Knowing	1	2	B2	MC
35.	C	Applying	1	2	B3	MC
36.	A	Reasoning	1	2	B3	MC
37.	B	Applying	1	2	B3	MC
38.	A	Applying	1	2	B4	MC
39.	A	Knowing	1	2	B4	MC
40.	A	Reasoning	1	2	B4	MC
41.	C	Knowing	1	2	B5	MC
42.	D	Knowing	1	2	B5	MC
43.	A	Applying	1	2	B5	MC
44.	C	Knowing	1	1	A1	MC
45.	C	Knowing	1	1	A1	MC
46.	C	Applying	1	1	A2	MC
47.	A	Knowing	1	1	A3	MC
48.	C	Reasoning	1	1	A3	MC
49.	C	Reasoning	1	1	A3	MC
50.	A	Applying	1	1	A3	MC
51.	B	Applying	1	1	A4	MC
52.	D	Applying	1	1	A4	MC
53.	C	Applying	1	1	A4	MC
54.	D	Applying	1	1	A4	MC

Part C: Numerical-Response Questions (Calculator Permitted)

Question Number	Keyed Response	Cognitive Process	Mark	Topic	PLO	Question Type
55.	-5	Knowing	1	3	C8	NR
56.	-4	Applying	1	3	C9	NR
57.	0.5	Applying	1	3	C9	NR
58.	9	Reasoning	1	2	B5	NR
59.	68	Knowing	1	1	A2	NR
60.	10.2	Applying	1	1	A3, A4	NR

Samples of correct student responses for the Numeric-Response Section

55. $\begin{matrix} + \\ \circ \end{matrix}$ $\begin{matrix} - \\ \bullet \end{matrix}$ 5 .

56. $\begin{matrix} + \\ \circ \end{matrix}$ $\begin{matrix} - \\ \bullet \end{matrix}$ 4 .

57. $\begin{matrix} + \\ \circ \end{matrix}$ $\begin{matrix} - \\ \circ \end{matrix}$ 0 . 5

OR $\begin{matrix} + \\ \circ \end{matrix}$ $\begin{matrix} - \\ \circ \end{matrix}$. 5

58. $\begin{matrix} + \\ \circ \end{matrix}$ $\begin{matrix} - \\ \circ \end{matrix}$ 9 .

OR $\begin{matrix} + \\ \bullet \end{matrix}$ $\begin{matrix} - \\ \circ \end{matrix}$ 9 .

59. $\begin{matrix} + \\ \circ \end{matrix}$ $\begin{matrix} - \\ \circ \end{matrix}$ 6 8 .

60. $\begin{matrix} + \\ \circ \end{matrix}$ $\begin{matrix} - \\ \circ \end{matrix}$ 1 0 . 2