

### Unit 4: Sections 7.1, 7.2 Skill Set

#### Section 7.1: Inverse Functions

For additional review, see *Just-In-Time Algebra and Trigonometry*, Appendix B.

Assessment Item	Correlated MML Problems	Textbook
Identify one-to-one functions graphically.	9	10
Given the formula for a one-to-one function, find its inverse.	19, 20	18
Graph a function and its inverse together to verify symmetry about $y = x$ .	23	27
Given a graph of a one-to-one function, sketch its inverse using symmetry with respect to the line $y = x$ .	29	30

Additional Suggested Problems: 1, 2, 3, 4

#### Section 7.2: The Natural Logarithm and Exponential Functions

For additional review, see *Just-In-Time Algebra and Trigonometry*, Appendices A and C.

Assessment Item	Correlated MML Problems	Textbook
Find the derivative of a function involving $\ln x$ noting the intervals on which the results are valid.	7, 13, 14	9, 10, 11
Evaluate an integral involving $\ln x$ including absolute values only when needed.	19	15, 18
Find the derivative of a function involving $e^x$ .	23, 25	27
Evaluate an integral involving $e^x$ .	35, 37	31, 33
Use logarithmic differentiation to find the derivative.	40, 41, 45	42, 44
Compute miscellaneous derivatives or integrals involving logarithmic and/or exponential functions.	57, 59, 63, 67	56, 60, 66

Additional Suggested Problems: 1, 3, 5, 28, 36, 38, 48, 53