

KFUPM  
Department of Mathematics and Statistics

**MATH 555**  
**Take-home Exam 2**

Solve **10** problems from below with **Two \*-problems**, at least, from each chapter. Only results from Atiyah's book can be used. If a non-assigned problem is needed, it should be solved as part of the assigned problem.

Chapter	Problems
NOETHERIAN RINGS	<b>1, 9*, 10, 11, 12, 16*, 21, 22, 23*</b>
ARTINIAN RINGS	<b>1*, 2*, 3, 4*, 6</b>
DISCRETE VALUATION RINGS AND DEDEKIND DOMAINS	<b>1, 2*, 3, 4*, 5*, 6*, 7, 8, 9</b>
COMPLETIONS	<b>1*, 3*, 4*, 5*, 6*, 7*, 9*, 12*</b>

**Your Choice:**

	Chapter	Problem	Score out of <b>10</b>
<b>1</b>			
<b>2</b>			
<b>3</b>			
<b>4</b>			
<b>5</b>			
<b>6</b>			
<b>7</b>			
<b>8</b>			
<b>9</b>			
<b>10</b>			
<b>Total out of 100</b>			