

**BREAKDOWN OF PRECALCULUS BC PREAP/DUAL TEST 1-1**  
**75 PTS: Non-Calculator and 25 PTS: Calculator**  
**WEDNESDAY, SEPTEMBER 5 AND THURSDAY, SEPTEMBER 6**

**Review:** Pg. 342: 1-17 odd, 16, 23, 25-28 all, 33, 39, 41 odd, 43-46 all, 51-58 all

**NON-CALCULATOR WEDNESDAY – 57 points**

<b>Part IA: Short Answer [57 pts.]</b>	<b>Total Amount</b>	<b>Total Points</b>
<b>§4.1: Radian and Degree Measure</b> <ul style="list-style-type: none"> <li>• Label and graph with initial &amp; terminal ray</li> <li>• Identify proper quadrants &amp; Coterminal Angles</li> <li>• Conversions of radians to degrees and degrees to radians</li> </ul> Examples: Pg. 342: 1-17 odd (omit 7, 13)	3 questions	8 points
<b>§4.1A: Arc Length and Sector Area</b> <ul style="list-style-type: none"> <li>• Exact Arc Length and Area of Sector Area using equations (not given) using a given diagram</li> </ul> Examples: Pg. 342: 15	2 questions	8 points
<b>§4.2: Reference Angles</b> <ul style="list-style-type: none"> <li>• Given an angle, identify the reference angle</li> </ul> Examples: Pg. 342: 51-54 all; 52) $85^\circ$ , 54) $\frac{\pi}{3}$	2 questions	4 points
<b>§4.2A: Unit Circle Values</b> <ul style="list-style-type: none"> <li>• Given a trigonometric function, identify answer</li> <li>• Apply reciprocal/original function</li> </ul> Examples: Pg. 342: 23, 25-28 all; 24) $\sin\left(-\frac{2\pi}{3}\right) = -\frac{\sqrt{3}}{2}, \cos\left(-\frac{2\pi}{3}\right) = -\frac{1}{2}; \tan\left(-\frac{2\pi}{3}\right) = -\sqrt{3}$ $\csc\left(-\frac{2\pi}{3}\right) = -\frac{2\sqrt{3}}{3}, \sec\left(-\frac{2\pi}{3}\right) = -2; \cot\left(-\frac{2\pi}{3}\right) = \frac{\sqrt{3}}{3}$ 26) $\cos(4\pi) = 1, 28) \cos\left(-\frac{13\pi}{3}\right) = \frac{1}{2},$	15 questions	16 points
Question: What is the reciprocal trig function of $\csc\frac{\pi}{8}$ and revisit the Unit Circle Worksheet. <b><u>KNOW THE UNIT CIRCLE.</u></b>		
<b>§4.3: Right Triangle Trigonometry</b> <ul style="list-style-type: none"> <li>• Given an angle, identify the missing side</li> <li>• Use the information given to determine the angle</li> <li>• Apply the meaning to a certain trigonometric function</li> </ul> Examples: Page 342: 33, 39, 41	2 questions	10 points

§4.4: Trigonometric Values

7 questions

11 points

- Given a point, identify all values of the triangle

Examples: Page 342: 39, 43-46; 51-58

$$44) \sin \theta = -\frac{4}{5}, \cos \theta = \frac{3}{5}; \tan \theta = -\frac{4}{3}; \quad \sin \theta = -\frac{\sqrt{26}}{26}, \cos \theta = -\frac{5\sqrt{26}}{26}; \tan \theta = \frac{1}{5};$$

$$\csc \theta = -\frac{5}{4}, \sec \theta = \frac{3}{3}; \cot \theta = -\frac{3}{4} \quad \csc \theta = -\sqrt{26}, \sec \theta = -\frac{\sqrt{26}}{5}; \cot \theta = 5$$

52)  $85^\circ$ , 54)  $\frac{\pi}{3}$ , 56)  $\frac{\pi}{4}$ ; 58)  $45^\circ$

**THURSDAY – 43 POINTS**

**NON-CALCULATOR – 18 points**

**Part IB: Multiple Choice [18 pts.]**

	<b>Total Amount</b>	<b>Total Points</b>
§4.1: Given a trig function and Quadrant, identify the trig function	1 question	3 points
§4.1: Identify Complementary and Supplementary Angles	1 question	3 points
§4.2: Identifying the proper reference angles	1 question	3 points
§4.3: Using given information, identify the proper trig functions	1 question	3 points
§4.4: Trig Values: Using knowledge for new trig functions	1 question	3 points
§4.4: Given a terminal side and an equation, identify trig function	1 question	3 points

**CALCULATOR – 25 points**

**Part II: Short Answer [25 pts.]**

	<b>Total Amount</b>	<b>Total Points</b>
§4.1: Radian measure in the calculator	1 question	1 point
§4.1: Complementary Angles	1 question	1 point
§4.2A: Unit Circle Values	1 question	1 point
§4.1A: Determine Angular and Linear Velocity	2 questions	7 points
<ul style="list-style-type: none"> <li>Apply the formulas (not given) to application problems</li> </ul>		
Examples: Page 342: 16; 16a) $66.6667\pi \frac{\text{rad}}{\text{min}}$ , 16b) $400\pi \frac{\text{in}}{\text{min}}$		
§4.1B: Application using DMS	1 question	5 points
<ul style="list-style-type: none"> <li>Converting Angles to DMS form and vice versa by using application (§4.8)</li> </ul>		
Examples: Page 342: 13		
§4.8: Application	1 question	5 points
<ul style="list-style-type: none"> <li>Applying the rules of angle of elevation or angle of depression</li> </ul>		
Examples: Page 342: 93, 94. 94) 9.6 feet		
Discussion Question	1 question	5 points