

**Math II Final Exam Question Bank Fall 2016**  
**Answer Section**

**MULTIPLE CHOICE**

- |            |   |
|------------|---|
| 1. ANS: B  | STA: G.CO.5 (Predict the effect of a given rigid motion on a given figure)                  |
| 2. ANS: A  | STA: G.CO.10  |
| 3. ANS: B  | STA: F-IF.8   |
| 4. ANS: B  | STA: F.BF.3   |
| 5. ANS: D  | STA: G.CO.3   |
| 6. ANS: B  | STA: A.SSE.3  |
| 7. ANS: C  | STA: F.BF.1   |
| 8. ANS: D  | STA: S.CP.4   |
| 9. ANS: A  | STA: N.RN.2   |
| 10. ANS: D | STA: A.REI.4a   |
| 11. ANS: D | STA: A-REI.4b   |
| 12. ANS: B | STA: G.CO.10 (sum of angles of triangle = 180)  |
| 13. ANS: C | STA: S.CP.7   |
| 14. ANS: A | STA: G.CO.8   |
| 15. ANS: D | STA: F-IF.7   |
| 16. ANS: B | STA: F-IF.8   |
| 17. ANS: B | STA: G.SRT.8  |
| 18. ANS: B | STA: F.BF.1   |
| 19. ANS: C | STA: A.CED.3  |
| 20. ANS: B | STA: S.CP.6   |
| 21. ANS: C | STA: G.SRT.12   |
| 22. ANS: D | STA: F.BF.1   |
| 23. ANS: B | STA: G.CO.3   |
| 24. ANS: D | STA: A-APR.1  |
| 25. ANS: B | STA: F-IF.8   |
| 26. ANS: A | STA: A-APR.1  |
| 27. ANS: C | STA: A.REI.4  |
| 28. ANS: A | STA: A.REI.2  |
| 29. ANS: D | STA: A.REI.2  |
| 30. ANS: A | STA: G.CO.2 (compare transformations that preserve distance and angle to those that do not) |
| 31. ANS: D | STA: N-RN.2   |
| 32. ANS: A | STA: A.CED.1  |
| 33. ANS: A | STA: F-IF.4   |
| 34. ANS: A | STA: F.BF.3   |
| 35. ANS: C | STA: G.CO.8   |
| 36. ANS: B | STA: G.CO. 5  |
| 37. ANS: C | STA: G.SRT.4  |
| 38. ANS: C | STA: G.CO.9   |
| 39. ANS: A | STA: G.SRT.3  |
| 40. ANS: D |   |

STA: G.CO.6 (use the definition of congruence in terms of rigid motions to decide if two figures are congruent.)

- 41. ANS: D                      STA: S.IC.2
- 42. ANS: B                      STA: F.BF.3
- 43. ANS: B                      STA: S.CP.8
- 44. ANS: C                      STA: G.SRT.6
- 45. ANS: B                      STA: S.CP.3a
- 46. ANS: C                      STA: N.RN.2
- 47. ANS: A                      STA: F.IF.7
- 48. ANS: A                      STA: S.CP.5

**SHORT ANSWER**

- 49. ANS:  
4/13

STA: S.CP.7

- 50. ANS:  
37°

STA: G.SRT.8

- 51. ANS:  
a.  $y = (x + 5)^2 - 9$   
b. (-5, -9)

STA: A.SSE.3

- 52. ANS:  
 $f(x,y) = (-y, x)$

STA: F.IF.2

- 53. ANS:

(a)

|       | Walk      | Car       | Other     | Total     |
|-------|-----------|-----------|-----------|-----------|
| Boy   | 15        | <b>25</b> | 14        | 54        |
| Girl  | <b>22</b> | 8         | 16        | <b>46</b> |
| Total | 37        | <b>33</b> | <b>30</b> | 100       |

- (b) 37/100
- (c) 24/100 or 6/25

STA: S.CP.4

- 54. ANS:  
\$1 or \$4

STA: A.REI.7

55. ANS:  
2/7 or 0.2857

STA: S.CP.8

56. ANS:  
 $10\sqrt{3}$  or 17.3

STA: G.SRT.12

57. ANS:  
(1, 8) and (-3, 4)

STA: A.CED.3

58. ANS:  
Step 5,  $x = \pm \frac{5}{2}$

STA: A-REL.1