

Final Exam Review Answers

1a 47.275, 47.4, (Mode:45.7&50.8)

1b Q1=44.1 Q2=47.4 Q3=50.8

IQR=6.7 SIQR=3.35

OUTLIER=none

2a 85.4825 2b 4.7775 2c 5.006

2d t=3.09 2e t=5.3

3. 955 values

4. 53.28%

5. 33.45%

6. 98 - 142

7. .6247 or 62.47%

8. .1587 or 15.87%

9. 138

10. 180 *schedules*

11. $C(8,3) = 56$

12.

$C(2,1) \bullet C(7,2) \bullet C(6,2) = 630$ *teams*

13. $\frac{6!}{2!3!} = 60$

14. $(8-1)! = 5040$

15.

$odds = \frac{P(s)}{P(f)} = \frac{1}{8}; P = \frac{success}{total} = \frac{1}{9}$

16. $P \begin{pmatrix} both \\ are \\ tens \end{pmatrix} = \frac{1}{221}$

17. MD=3

18. SD=3.6171

19. 6, Q1=9, Q2=11.5, Q3=14, 18

20. 0.4775=47.75%

21. 41.8 - 58.2 or 41.75 - 58.25

22. 7.96%

23. 1170°

24. 100° & -260°

25. 14°

26. $\tan A = \frac{8\sqrt{161}}{161}$

27.

$\csc = \frac{1}{\sin}; \sec = \frac{1}{\cos}; \cot = \frac{1}{\tan}$

28. $\tan \theta = 0.2597$

29. 1

30. $\csc 300^\circ = \frac{-2\sqrt{3}}{3}$

31. $\csc \theta = \frac{25}{24}$

32. 178.2 ft

33. $B = 42.2^\circ$

34. $a = 9.2$

35. $-\sqrt{3}$

36. $\frac{7\pi}{9}$

37. $\frac{11880^\circ}{37}$

38. $9x^6y^6$

39. $x\sqrt[6]{32x^2}$

40. 77.880

41. 1402.55 *birds*

42. 12.18g

43. $\frac{-4}{3}$

44. 5

45. 2.0183

46. -6.3013

47. 6.7296

48. $y = \frac{2}{7}x + \frac{25}{7}$

49. $\begin{bmatrix} -13 & 30 \\ 30 & -52 \end{bmatrix}$

50. -61

51. *y-axis*

left 3

52. *vertical compression
down 3*

54. $\frac{-3}{2}$ & $\frac{1}{3}$

55. $k = -9$

56. 4,2,0

57. -17.5

58. $9\sqrt{3}y^{11}$

59. $\sum_{n=0}^{\infty} 27 \left(\frac{1}{3}\right)^{n-1}$

60.

$32x^5 - 240x^4 + 720x^3 - 1080x^2 + 810x - 243$