

# Exam #7 - SOLUTION

Penalty for incorrect answer: 25%

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Answer	c	a	b	a	b	a	d	c	d	a	c	a	c	c	d	d	a	a	c	d

1. What is  $P(A \cup B)$  if A,B disjoint? (Val: 0.8955223880597014)

- a  $P(A)-P(B)$
- b  $P(A) \text{ times } P(B)$
- c  **$P(A)+P(B)$  [CORRECT]**
- d 1

2. Algebra Q4: Solve for x... (Val: 1.1940298507462686)

- a **Answer A (Correct) - Algebra Q4 [CORRECT]**
- b Answer B (Wrong) - Algebra Q4
- c Answer C (Wrong) - Algebra Q4
- d Answer D (Wrong) - Algebra Q4

3. Calculus Q10: Solve for x... (Val: 1.1940298507462686)

- a Answer B (Wrong) - Calculus Q10
- b **Answer A (Correct) - Calculus Q10 [CORRECT]**
- c Answer D (Wrong) - Calculus Q10
- d Answer C (Wrong) - Calculus Q10

4. What is the complement of  $P(A)$ ? (Val: 0.8955223880597014)

- a  **$1-P(A)$  [CORRECT]**
- b  $1+P(A)$
- c  $1/P(A)$
- d  $P(A)$

5. What is  $\tan(0 \text{ degrees})$ ? (Val: 0.5970149253731343)

- a 1
- b **0 [CORRECT]**
- c infinity
- d undefined

6. Calculus Q5: Solve for x... (Val: 1.1940298507462686)

- a **Answer A (Correct) - Calculus Q5 [CORRECT]**
- b Answer B (Wrong) - Calculus Q5
- c Answer C (Wrong) - Calculus Q5
- d Answer D (Wrong) - Calculus Q5

7. Mean of  $\{5,5,5,5\}$ ? (Val: 0.8955223880597014)

- a 10
- b 0
- c 20
- d **5 [CORRECT]**

8. Algebra Q7: Solve for x... (Val: 1.1940298507462686)

- a Answer C (Wrong) - Algebra Q7
- b Answer D (Wrong) - Algebra Q7
- c **Answer A (Correct) - Algebra Q7 [CORRECT]**
- d Answer B (Wrong) - Algebra Q7

9. Median of {2,4,6,8}? (Val: 0.8955223880597014)

- a 6
- b 7
- c 4
- d **5 [CORRECT]**

10. Algebra Q8: Solve for x... (Val: 1.1940298507462686)

- a **Answer A (Correct) - Algebra Q8 [CORRECT]**
- b Answer D (Wrong) - Algebra Q8
- c Answer B (Wrong) - Algebra Q8
- d Answer C (Wrong) - Algebra Q8

11. Calculus Q3: Solve for x... (Val: 1.1940298507462686)

- a Answer D (Wrong) - Calculus Q3
- b Answer C (Wrong) - Calculus Q3
- c **Answer A (Correct) - Calculus Q3 [CORRECT]**
- d Answer B (Wrong) - Calculus Q3

12. What is  $\sin(30 \text{ degrees})$ ? (Val: 0.5970149253731343)

- a **1/2 [CORRECT]**
- b 0
- c  $\sqrt{3}/2$
- d 1

13. Algebra Q9: Solve for x... (Val: 1.1940298507462686)

- a Answer C (Wrong) - Algebra Q9
- b Answer B (Wrong) - Algebra Q9
- c **Answer A (Correct) - Algebra Q9 [CORRECT]**
- d Answer D (Wrong) - Algebra Q9

14. Algebra Q6: Solve for x... (Val: 1.1940298507462686)

- a Answer C (Wrong) - Algebra Q6
- b Answer D (Wrong) - Algebra Q6
- c **Answer A (Correct) - Algebra Q6 [CORRECT]**

d Answer B (Wrong) - Algebra Q6

15. Calculus Q4: Solve for x... (Val: 1.1940298507462686)

- a Answer B (Wrong) - Calculus Q4
- b Answer C (Wrong) - Calculus Q4
- c Answer D (Wrong) - Calculus Q4
- d **Answer A (Correct) - Calculus Q4 [CORRECT]**

16. Sum of angles in a triangle? (Val: 0.8955223880597014)

- a 270 degrees
- b 90 degrees
- c 360 degrees
- d **180 degrees [CORRECT]**

17. What is  $\cos(90 \text{ degrees})$ ? (Val: 0.5970149253731343)

- a **0 [CORRECT]**
- b -1
- c  $1/2$
- d 1

18. Pythagorean theorem:  $a^2 + b^2 = ?$  (Val: 0.8955223880597014)

- a  **$c^2$  [CORRECT]**
- b  $ab$
- c  $2c$
- d  $a+b$

19. Calculus Q7: Solve for x... (Val: 1.1940298507462686)

- a Answer C (Wrong) - Calculus Q7
- b Answer B (Wrong) - Calculus Q7
- c **Answer A (Correct) - Calculus Q7 [CORRECT]**
- d Answer D (Wrong) - Calculus Q7

20. Area of a circle with radius 5? (Val: 0.8955223880597014)

- a 50 pi
- b 10 pi
- c 5 pi
- d **25 pi [CORRECT]**