

Statistics Answers  
ACTM State Contest  
April 2014

1. d
2. b
3. d
4. b
5. a
6. d
7. d
8. a
9. c
10. a
11. a
12. d
13. a
14. d
15. b
16. c
17. b
18. a
19. d
20. a
21. c
22. d
23. a
24. d
25. a

Tie Breaker Items

1.  $P[+, \text{test}/\text{cancer} = Y] = 2/3$  or approximately 0.7
2.  $P[+ \text{test}/\text{cancer} = N] = 18/200$  or approximately 0.90
3.  $P[\text{cancer} = Y/+ \text{test}] = 2/20$  or  $1/10$  or 0.1