

Answer Key
MATH DAY AT THE BEACH 2008

MULTIPLE CHOICE

1. E $a^2b^2/(a^2 + b^2)$
2. B $\cos 20^\circ$
3. B (94)
4. C (108)
5. A $(\frac{1}{2})$
6. D (7)
7. A (0)
8. C (64)
9. C (C and D)
10. A $(4, \frac{\pi}{6})$
11. B (39)
12. E (77°)
13. E (2009)
14. E (22)
15. C (2)

INDIVIDUAL FREE RESPONSE

16. 259
17. $(7, -1)$ and $(-5, 3)$
18. $\frac{1}{3}$
19. 13
20. 7

TEAM ROUND

1. 2 and 2009 (Must have both answers)
2. 53
3. 29
4. 7
5. $\frac{27}{64}a^4$
6. 2π
7. 26
8. 169