

Answer Sheet

Dual Dig Level II

March 14, 2010

Name: \_\_\_\_\_

Name: \_\_\_\_\_

School: \_\_\_\_\_

1. 3450

2. 7

3. -2223

4. 3,922,632,451

5.  $18\pi - 36$  sq cm

6.  $4(\cos 150^\circ + \sin 150^\circ) = 4\text{cis}150^\circ$

7.  $x = -3/2, x = 5, \text{ and } x = -4$

8. .00000138

9.  $x = -2, 5, 3 \pm i$

10. No asymptotes

11. 53 are neither  
 $\frac{4}{\sqrt{21}} \approx 0.87287$  mi from pt directly across start

12. point or  $7 - \frac{4}{\sqrt{21}} \approx 6.12712$  mi from bomb

13.  $f_x(x, y) = 12x^2, f_y(x, y) = -6y$

14.  $3 f(x)$

15. ~~3589.86~~  $\approx 3590$  years **3574**

16.  $V = \frac{1}{3}h(a^2 + ab + b^2)$

17.  $\frac{2}{x-1} + \frac{-1}{x+1} + \frac{-1}{x+2}$

18. 16 inches

19.  $x = -3/8, y = 17/12$

20. 703 handshakes

Number Right

- Number Wrong

x 0.5 =

Score