

HIGH SCHOOL MATHEMATICS COMPETITION

ANSWER KEY BOMB 2004

Page 1

- 1) $\frac{2}{3}$ sec. 2) 5 3) 8 4) $x^4 - 6x^3 + 11x^2 - 6x + 10 = 0$ 5) 17

Page 2

- 1) 9 2) $\frac{md}{m+1}$ 3) $9 + 4\sqrt{5}$ 4) 40 sq. in. 5) 30°

Page 3

- 1) 0.08% 2) $\frac{84\pi}{5}$ sq. units 3) $\frac{\pi}{2}$ 4) $x = -1$ or $x = 1$ 5) 88

Page 4

- 1) 1 2) $\pm 2\sqrt{2}$ 3) 3 : 1 4) 25° 5) $30^\circ, 60^\circ, 120^\circ, 150^\circ$

Page 5

- 1) 2^7 (or 128) 2) $24\sqrt{3}$ cu. in. (or $\frac{72}{\sqrt{3}}$ cu. in.) 3) 12 4) 7 5) -64