

Pre-Calculus 2 Final Exam Review Solutions Tuesday, May 22, 2007

1. $(-\frac{13}{7}, \frac{45}{14}, \frac{29}{7})$

2. 522.06

3. $\sum_{k=1}^{64} (3k + 10)$

4. $\frac{(x-4)^2}{144} + \frac{(y+6)^2}{225} = 1$

5. $\frac{122}{99}$

6. $y - 1 = \frac{1}{12}(x - 6)^2$

7. $8 \operatorname{cis} \frac{5\pi}{3}$

8. $\pm \frac{\sqrt{13}}{3}$

9. 102

10. $5 \operatorname{cis} 2$

11. $a_1 = 2$
 $a_{n+1} = 3a_n - 2$

12. $\begin{bmatrix} \frac{12}{29} & -\frac{12}{29} \\ -\frac{1}{29} & \frac{1}{29} \end{bmatrix}$

13. $\frac{5}{x} + \frac{2}{x-3} - \frac{4}{x+5}$

14. 1,716

15. 376

16. $\begin{bmatrix} -11 & 3x+7y+35 \\ 60 & 2x+y-42 \end{bmatrix}$

17. $\frac{\pi}{3}, \frac{2\pi}{3}$

18. $-9x + 54$

19. 518,918,400

20. 59.81

21. 863.66

22. $\frac{625}{3}$

23. 121,978

24. $847,660,528x^{10}y^{30}$

25. 11.045

26. $35.78^\circ, 144.22^\circ$