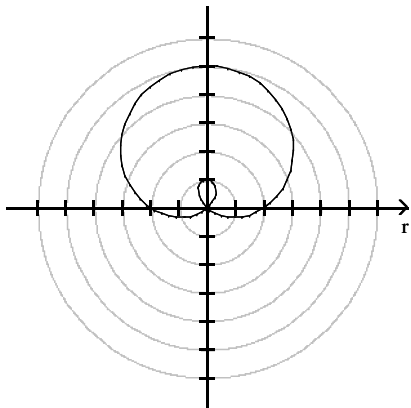


Answer Key

Testname: MATH 1060 FINAL F07

- 1) D
- 2) C
- 3) A
- 4) C
- 5) B
- 6) C
- 7) B
- 8) C
- 9) A
- 10) B
- 11) D
- 12) A
- 13) B
- 14) $64(\cos 180 + i \sin 180)$
- 15)



limaçon with inner loop

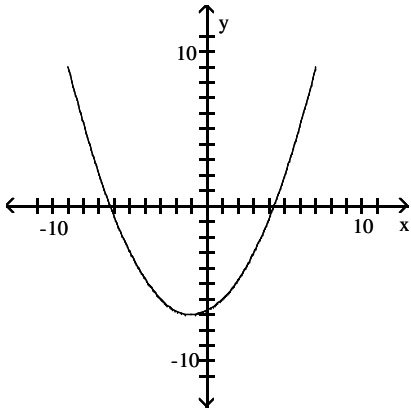
Students should list at least 4 points.

- 16) $\alpha = 57.1^\circ$, $\beta = 44.4^\circ$, $\gamma = 78.5^\circ$
- 17) two triangles
 $\alpha_1 = 30.34^\circ$, $\gamma_1 = 139.66^\circ$, $c_1 = 41.01$ or
 $\alpha_2 = 149.66^\circ$, $\gamma_2 = 20.34^\circ$, $c_2 = 22.02$

Answer Key

Testname: MATH 1060 FINAL F07

18)



There should be markings on the graph to indicate orientation.
Students should give at least 4 points on the graph.

19) $0 + 2k\pi$, $\pi + 2k\pi$, $\frac{2\pi}{3} + 2k\pi$, $\frac{4\pi}{3} + 2k\pi$

Note: The first 2 solutions may be replaced by $k\pi$. Where k is any integer.

20) $\frac{24}{25}$

21) 61.8°

22) Answers may vary.

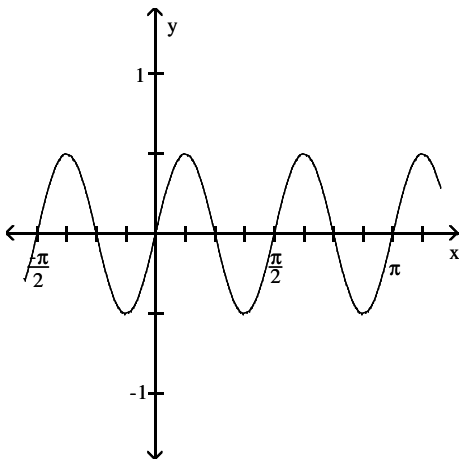
23) 939.3 ft-lb

24) simple harmonic; 8 m; 4 sec; $\frac{1}{4}$ oscillation/sec

25) 201.7 yd

26) 15.94 m

27) (i) $\frac{1}{2}$ (ii) $-\frac{3\pi}{4}$ (iii) $\frac{\pi}{2}$



Answer Key

Testname: MATH 1060 FINAL F07

28) $\frac{\sqrt{2}}{2}(\cos 15^\circ + i \sin 15^\circ)$

29) $4x^2 + 25y^2 = 100$ or $\frac{x^2}{25} + \frac{y^2}{4} = 1$; $-5 \leq x \leq 5$