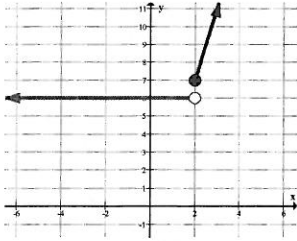


AFM Final Exam Review S13 Answer Key

1. d
2. b
3. b



4. domain  $(-\infty, \infty)$  and  
range  $[6] \cup [7, \infty)$

$$5. f(x) = \begin{cases} 8.5x + 10 & \text{if } 0 < x \leq 25 \\ 222.5 + 7.75(x - 25) & \text{if } x > 25 \end{cases}$$

$(0, 25]$   
 $(25, \infty)$

20 shirts = \$180, 40 shirts = \$338.75

6. b
7. d
8. b
9. b
10. a
11. d
12. c
13. b
14. b
15. a) not possible (if base can't be negative, -64 otherwise)  
b) 22  
c) .7993
16. c
17. d
18. c
19. d
20.  $y = 29000(.86)^5$ ; \$13,642.38
21. 1929
22. c
23. a
24. b
25. d
26. b
27. c
28. a
29. d
30. 4, 4, 8, 12, 20, 32
31. d
32. c
33. b

34. a
35. b
36. a
37. 325.5 miles
38. 1.2 km
39. c
40. a
41.  $48\pi$ ft/min
42. d
43. c
44.  $\frac{\sqrt{3}}{2}$
45. b
46. b
47. d
48. b
49. b
50. a
51. d
52. c
53. a
54.  $1/34$
55.  $7/13$
56. d
57. c
58. c
59. c, no
60. d
61. a
62. d
63. a) 50, b) 10s, 40s c) 10000ft d) ,  $a$  is half the downward acceleration due to gravity (on Earth,  $a$  is  $-16 \text{ ft/s}^2$ ),  $v_0$  is the initial upward velocity of the object in meters per second or feet per second so the initial upward velocity is 800 ft/sec, and  $s_0$  is the initial height of the object in meters or feet, which is 0.
64. d
65. a)  $y=5/3x+17$ , b) slope  $-5$  new chans every 3 years, c) 45ish channels, extrapolation
66.  $y=2.4x + 9$
67. quartic