Integrated Math 1 Review Solutions.

1. a.

	Gender		
Age	Male	Female	
18–27	10	5	15
28–37	16	2	18
38–47	18	10	28
48–57	12	17	29
Total	56	34	90

b. 28

c. 48-57 Year olds, 14

2. $\frac{18}{25}$

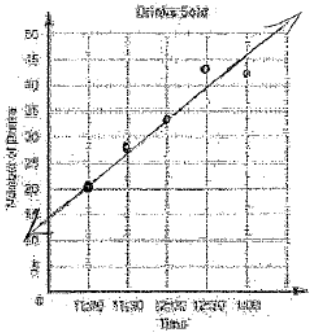
3. A no, B yes, C yes, D no

4. B

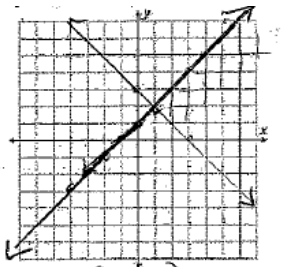
5. C

6. B

7.



8.



solution: (1, 2)

9. C

10. $\left(3\frac{1}{2}, 4\right)$

11. Yes, the point is in the shaded region.

12. x + y = 89
    5x + 3y = 371
    (52, 37)

13. (-6, -39)

14. $f(1)=27$
    Recursive rule: $f(n)=f(n-1)\left(-\frac{1}{3}\right)$ for $n\geq 2$
    Explicit rule: $f(n)=27\left(-\frac{1}{3}\right)^{n-1}$

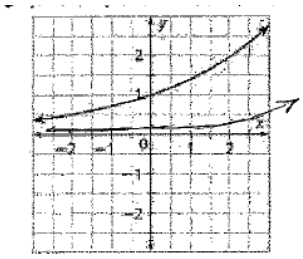
15. 78,125

16. ¼

17.

x	$f(x)=0.10(1.4)^x$
−2	0.0510
−1	0.0714
0	0.10
1	0.14
2	0.196

18.



Describe the end behavior of the graph.

As $x\to\infty$ $f(x)\to\infty$

As $x\to-\infty$ $f(x)\to 0$

19. 11

20. $f(y)=726(0.98)^y$

21. C

22. x=7, ∠KJM = 70°

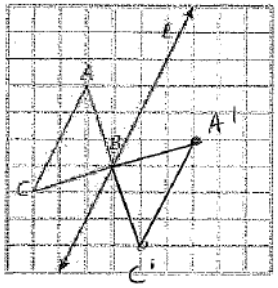
23. $\overline{AB}$

24. (x, y)→(x-3, y+2)

25. $\langle -6,-6\rangle$

26. Q' (3, 5), R'(5, 3) S'(2, -1) T'(0, 4)

27.



28. 60°, 24 cm

29. 5, 72°

30. x = 3

31. reflection over the x-axis and the a translation left six units and down one unit.

32. (x, y)→(x, -y)→(x-6, y-1)

33. y = -2x

34. $y = -\frac{1}{3}x + 4\frac{2}{3}$

35. 45°

36. y=7

37. m∠1 =123°, m∠3 =123°, m∠4 =57°

38. m∠4 =62°, m∠5 =118°, m∠8 =62°

39. D Corresponding angles C Same side interior angles
B Alternate interior angles A Vertical angles

40. x = 6

41. AC = 24

42. x= 10

43. ASA ∠BCA≈∠DAC, AC≈AC, ∠BAC≈∠DCA
ΔBCA≈ΔDAC

44. SAS BD≈BD, ∠CBD≈∠ADB, AD≈BC
ΔBCD≈ΔDAB

45. m∠A=61°, BC = 12, m∠DCE= 29°
ED = 5, x=6, y=3