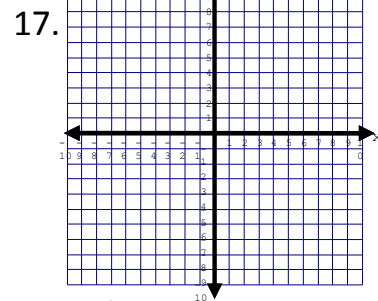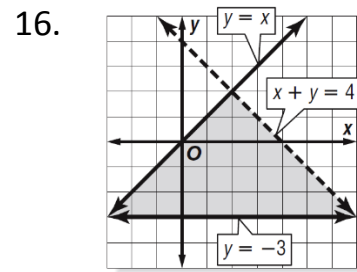## KEY to T2 Rev A

1. Base: 5 ft; Height: 12 ft.

2. 320 L

3. plane: 450 mph; wind: 50 mph

4. 5 sec.; 100 ft. high

5. arithmetic; $a_n = 6n - 3$

6. geometric; $a_n = 128\left(\dfrac{3}{4}\right)^{n-1}$

7. a. x = 3

   b. n = 8

8. a. 4
   b. 125

9. $y = 2x - 20$

10. $y = -1$

11. (3, 9)

12. No solution

13. Infinitely many solutions

KEY to T2 Rev B

14. (7, -1)

15. (6, 2)

16.

17.

18. a. decay; 40%   b. growth; 3.5%

19. $y = 10,000(0.98)^t$

20. 144

21. $\dfrac{x^3 y^3 z}{2}$ 22. $-\dfrac{16}{x^6}$ 23. $\dfrac{12x^4}{y^{16}}$

24. a. degree 2 (quadratic) trinomial

    b. degree 0 (constant) monomial

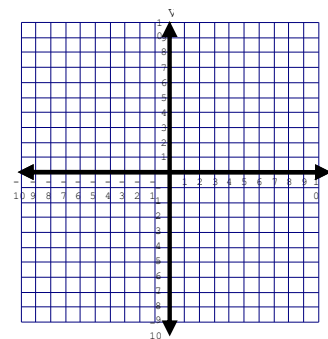   c. degree 3 (cubic) binomial

    d. degree 1 (linear) binomial

25. 8a² + 2a - 3

26. x³ - 8

27. 64a² - 4b²

28. $\dfrac{1}{16}x^2 + 2x + 16$

29.

30. The maximum is 29.