1. independent variable

2. linear

3. range

4. Answers may vary. Sample:

![Graph of Speed vs. Time]

5. Answers may vary. Sample:

![Graph of Distance from Bench vs. Time]

6. Independent variable is chairs painted. Dependent variable is paint left.
   Each time \( p \) increases by 1, \( L \) decreases by 30.
   \[ L = 128 - 30p \]

7. Independent variable is number of snacks purchased. Dependent variable is total cost.
   For each additional snack, the total cost goes up by 3.
   \[ C = 18 + 3s \]

8. Independent variable is number of stairs climbed. Dependent variable is elevation above sea level.
   The elevation is 311 more than 18 times the number of flights climbed.
   \[ E = 15n + 311 \]

9. nonlinear

10. linear

11. nonlinear

12. linear

13. continuous
29. \( A(n) = 13 + (n-1)(11) \)

30. \( A(n) = 19 + (n-1)(-1) \)

17. \( V = 243 - 0.2s \)

18. \( C = 200 + 45h \)

19. not a function

20. function

21. \(-4; 6\)

22. \(53; 33\)

23. \(\{7.2, 1.12, -4.2, -34.6\}\)

24. \( A(1) = 3; A(n) = A(n-1) + 5; A(n) = 3 + (n-1)(5) \)

25. \( A(1) = -2; A(n) = A(n-1) - 3; A(n) = -2 + (n-1)(-3) \)

26. \( A(1) = 4; A(n) = A(n-1) + 2.5; A(n) = 4 + (n-1)(2.5) \)

27. \( A(1) = 18; A(n) = A(n-1) - 7; A(n) = 18 + (n-1)(-7) \)

28. \( A(n) = 4 + (n-1)(3) \)