

**Homework Solutions – textbook page 537 #21-38**

21. Inverse variation

22. Inverse variation

23. Neither

24. Direct variation

25. Inverse variation

26. Direct variation

27. Direct variation

28. Neither

29.  $y = -\frac{10}{x}$

$$y = -5$$

30.  $y = \frac{32}{x}$

$$y = 16$$

31.  $y = \frac{7}{x}$

$$y = 3.5$$

32.  $y = \frac{5}{x}$

$$y = 2.5$$

33.  $y = -\frac{4}{x}$

$$y = -2$$

34.  $y = \frac{9}{32x}$

$$y = \frac{9}{64}$$

- 35. Inverse variation
- 36. Direct variation
- 37. Neither
- 38. Inverse variation

51.  $D = \frac{k\sqrt{L}}{T^2}$

- 52. The diameter of Polaris is 100 times the diameter of the sun.