Section 6.2: Representations of Functions (Rules and Tables) pp. 253-255 (#1, 4, 7-18, and 30-32)

- 1) The input variable is x, and the output variable is y.
- 2) in words, as equations, as input-output tables, as mapping diagrams, as graphs
- 3) What output is twice the sum of the input 3 and 4? 2(3+4)The other functions translate to 2(3) + 4. (Technically, "What output is 4 increased by twice the input 3?" is a different function than the other two, but it yields the same outputs.)

4) y = 4x

7) $y = \frac{1}{2}x$

8) y = x + 11 9) y = x - 3

10) $y = x^3$

11) y = 6x 12) y = 2x + 1

13) 8

14) -35

15) -17

16) 3.5

17) 54

18) 3

30) -3

31) -4

32) 36