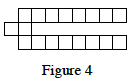
**1.1.2 HW Solutions**

* **1-15. See below:**
  1. 
  2. 42 tiles.  Add 4 tiles to get the next figure
* **1-16. See below:**
  1. *x* = 0
  2. *x* = all real numbers
  3. *x* = 14
  4. no solution
* **1-17. See below:**
  1. http://textbooks.cpm.org/images/answers/cca/chap01/cca_1-17a_ans.gif
  2. http://textbooks.cpm.org/images/answers/cca/chap01/cca_1-17b_ans.gif
  3. http://textbooks.cpm.org/images/answers/cca/chap01/cca_1-17c_ans.gif
  4. http://textbooks.cpm.org/images/answers/cca/chap01/cca_1-17d_ans.gif
* **1-18. See below:**
  1. $18
  2. Yes, it is proportional because 0 gallons cost $0.  Doubling (or tripling) the gallons of gas would double (or triple) the cost.
  3. 8.4 gallons
  4. Typical response: The line would get steeper.
* **1-19. See below:**
  1. −17
  2. 8
  3. 8
  4. 486
* **1-21. See below:**
  1. 5
  2. 19
  3. −76
* **1-22. See below:**
  1. The negative number indicates the elevation is below sea level.
  2. The elevation decreases, that is, becomes more negative.
  3. –2700 m; 675 m; 0 m
  4. See graph at right.
  5. Yes, the table and resulting graph go through (0, 0) and doubling (or

tripling) the time doubles (or triples) the elevation. This is a decreasing

proportional relationship.

* **1-23. See below:**
  1. *x*= –3
  2. *x*= 5
  3. *x* = http://textbooks.cpm.org/images/common/2-3.png
* **1-24. See below:**
  1. 84 and no real solution.
  2. He cannot get an output of 0 y = x2 + 3. He can get an output of 0 by using an input of 4 in  
     y = http://textbooks.cpm.org/images/cc4/common/sqrx.gif–2.