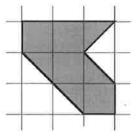
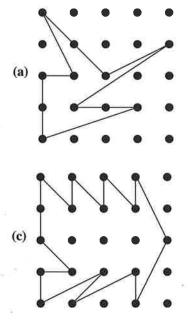
1.4 Problem Solving

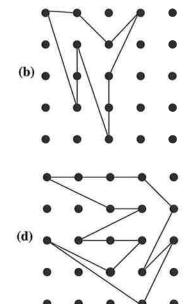
5. An artist is planning to construct a rectangular wall design from square tiles. The wall is 72 inches long and 42 inches wide. All the square tiles must be the same size, and the length of the sides must be a whole number of tiles.

- (a) Find three different sizes of square tiles that could be used to completely fill the rectangular space, with no tiles overlapping and no tiles overlapping the border.
- (b) Determine the smallest number of square tiles that could be used to fill the rectangular space.
- 6. Find the area of the figure shown below. What strategies have you used?



7. Find the area of the figures enclosed by rubber bands below. What strategies have you used?





- 8. A group of nine people, some adults and some children, went to a movie theather. Adult admission was \$8 and child admission was \$5. The amount charged was \$55. Could this amount be correct?
- 9. Give an example of a problem whose solution set contains
  - (a) no elements
  - (b) exactly one element
  - (c) exactly four elements