

2006 ISAT Grade 4  
Mathematics  
Short Response Item #1

**State Goal 10:** Data Analysis, Statistics, and Probability

**Standards 10A, 10B:** Data Analysis and Statistics

**Assessment Objective 10.4.01:** Read and interpret data represented in a pictograph, bar graph, line (dot) plot, Venn diagram (with two circles), tally chart, table, line graph, or circle graph.


1

Using the graph below, how many more students play football than basketball?

Show your work.

**Sports Students Play**



Each  = 4 students.

2006 ISAT Grade 4  
Mathematics  
Short Response Item #2

**State Goal 8:** Algebra

**Standard 8A:** Representations, Patterns, and Expressions

**Assessment Objective 8.4.01:** Determine a missing term in a pattern (sequence), describe a pattern (sequence), and extend a pattern (sequence) when given a description or pattern (sequence).

2

Explain a rule that could be used to make the pattern below.

0, 6, 4, 10, 8, 14, 12, 18, ...

**2006 ISAT Grade 4  
Mathematics  
Extended Response Item**

**State Goal 7:** Measurement

**Standards 7A, 7B, 7C:** Units, Tools, Estimation, and Applications

**Assessment Objective 7.4.03:** Solve problems involving the perimeter of a polygon with given side lengths and the area of a square, rectangle, or irregular shape composed of rectangles using diagrams, models, and grids or by measuring (may include sketching a figure from its description).

**1**

The zookeeper wants to build a new area for a petting zoo using the following rules:

- The petting zoo must be in the shape of a polygon with an *even* number of sides.
- The perimeter of the petting zoo should be 100 feet.

Draw a picture of a petting zoo that the zookeeper could build using the above rules. Label the length of each side of your petting zoo.

Show all your work. Explain in words how you found your answer. Tell why you took the steps you did to solve the problem.