

## Patterns, Relations and Functions Test Questions

Below are sample questions from the TIMSS achievement tests in Science administered to twenty-six countries. TIMSS is a research project sponsored by the International Association for the Evaluation of Educational Achievement (IEA). These questions may be used in the classroom, as a tool for evaluation, or to provide examples of test-question writing.



### Grades 3 and 4

1. Tanya has read the first 78 pages in a book that is 130 pages long. Which number sentence could Tanya use to find the number of pages she must read to finish the book?
- A.  $130+78=?$
  - B.  $?-78=130$
  - C.  $130/78=?$
  - D.  $130-78=?$

Answer: D

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2. What do you have to do to each number in column A to get the number next to it in column B?

Column A	Column B
10	2
15	3
25	5
50	10

- A. Add 8 to the number in column A.
- B. Subtract 8 from the number in column A.
- C. Multiply the number in Column A by 5.
- D. Divide the number in Column A by 5.

Answer: D

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3. Which pair of numbers follows the rule "Multiply the first number by 5 to get the second number"?

- A. 15--3
- B. 6--11
- C. 11-6
- D. 3--15

Answer: D

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4. Henry is older than Bill, and Bill is older than Peter. Which statement must be true?

- A. Henry is older than Peter.
- B. Henry is younger than Peter.
- C. Henry is the same age as Peter.
- D. We cannot tell who is oldest from the information given.

Answer: A

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5. These numbers are part of a pattern.

50,46,42,38,34,....

What do you have to do to get the next number?

Answer: \_\_\_\_\_

Answer: The number decreases by 4