13. ANSWERS AND EXPLANATIONS FOR GRADE 6 SAMPLE MATHEMATICS TEST

After children have tried the practice EQAO Grade 6 Math test, teachers and/or parents should correct and evaluate their work.

Following are the answers for that test, and a brief explanation of how the student should have arrived at the answer. Correct your child's work; use the explanation to help the child understand why errors were made. Grade 6 math is quite difficult, and children may need help (and your ability to develop similar questions) to understand some of the elements that are being tested.

MATHEMATICS TEST 1

1. How many times will he get a 3? 11

Each number occupies 1/6 of the cube, so the probability is that 3 will come up 11 times out of 66 rolls (one out of every six rolls).

2. How many hops will it take the grasshopper to hop 45 metres? 4

The first hop is 24 m; the second is 12 m; third is 6 m; fourth is 3 m. Add those four hops together, and the total is 45m, the total required in the question. [It must be a flying grasshopper, to jump 24 m at one bound!]

3. How much greater is (.01 x 482) than (.001 x 482)? 4.338

Students must calculate the expressions in the brackets (4.82 and .482), and then subtract 4.82 - .482 (remembering to keep the decimal points directly under each other, and adding a zero to 4.82 if necessary to facilitate subtraction).

4. Which unit is most appropriate to describe the length of a soccer field? metre

Far too many millimetres or centimetres would be needed to describe the length of a soccer field; the field would be only a small fraction of a kilometre.

5. What is the value of M? 8

The value of T can be calculated from the first equation (7 x 3 = 21). Replacing T with 7 in the second equation gives the value of M = 8

6. Approximately how many times will the arrow stop on red? 20

Each colour occupies 1/3 of the circle, so the probability is that the arrow will stop on red 20 times out of 60 spins.

7. Which grid shows the correct plotting? Grid D

The first co-ordinate in each bracket refers to the horizontal axis of the graph.

8. What is Julia's weight? Julia's weight is 50 kg.

Students must show that they have added the weights of Julia's four linemates, to a total of 196 kg. Then they must calculate the total weight of the line, including Julia, by multiplying 49.2 x 5 = 246. The difference between the two totals is Julia's weight.

9. The broken line graph should appear as shown at the top of the next page, and be labelled properly:

The scale shown, with intervals of 25 tabs, is best because It must show a range from 25 to 175. The student could omit 200 on the scale. Choosing other intervals than 25 would be inefficient.