

ANSWERS AND EXPLANATIONS FOR EQAO 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, and use the explanation to help the child understand why errors were made. Grade 6 math is quite difficult, and children may need plenty of help (and your ability to develop similar questions) to understand some of the elements that are being tested.

1. 1. 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 $49.2 \times 5 = 246$. The difference between the two totals is Julia's weight.
2. Jamal's mother needed to order 3 pizzas.
All together, the children at the party ordered 17 slices of pizza. If Jamal's mother ordered 2 8-slice pizzas, there would be one slice too few. When she orders three pizzas, she can have some pizza too, and there will still be extra pieces for hungry boys.
3. What fraction represents the number of children? C $\frac{2}{5}$
40% means $\frac{40}{100}$. Reduce that fraction to simplest terms (by dividing top and bottom by 20), and it becomes $\frac{2}{5}$.
4. What is the 7th term in the sequence? F 182
The student must calculate that each term increases by 29 (e.g. by subtracting the first term from the second term). 95 is the fourth term in the sequence, so the student could add $95 + 29 + 29 + 29$ to arrive at the seventh term, or multiply 29×3 , and add the product to 95.
5. What is the mean weight of the cargo on the five trucks? J 231 kg
"Mean" means "average." The student must add the weight of the cargo on the five trucks, and divide by 5 to find the mean.
6. What is the value of M? S 8
 *$T \times 3 = 21$. Subtract 21 from 29 to get the answer.
One correct way to express the technique for solving equations is "If you add a certain amount on one side of the equal sign, you have to add the same amount on the other side of the equal sign." (That is true whether you're adding, subtracting, multiplying or dividing.) In this question, you subtract 21 from each side of the equation, resulting in $M = 8$.*
7. What is the total surface area of all the sides of this rectangular prism? B 120 cm^2
*The pyramid has four triangular sides, plus its rectangular base.
The area of a triangle is measured in square units, and is found by multiplying the length of its base by its height, and dividing the product by 2. (see explanation on page 35.) Two of the triangles have a 7 cm base and 6 cm height, so their area is 21 cm^2 each; the two other triangular sides have a 6 cm base and 6 cm height, so their area is 18 cm^2 each.
The area of the rectangular base of the pyramid is found by multiplying the length by its width (6×7).
All together, the area of all the sides is $21 + 21 + 18 + 18 + 42 = 120 \text{ cm}^2$.*

