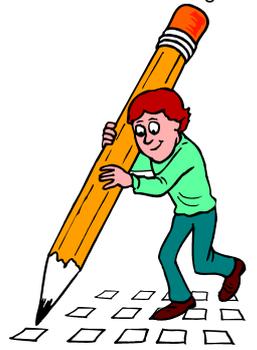




Conquesta 2008

(International Multiple Choice School Olympiads – Est. 1998)
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Mathematics 1 – Year 6

Welcome to your Conquesta Olympiad. As you read and answer the questions, we hope that you enjoy and learn from the information. Once you have read the information and the questions carefully, you have to make a choice. When you have decided which of the answers is correct, completely fill in the matching square on your answer sheet using a 2B or a B pencil. For example, if the answer to question 4 is c, then neatly fill in the square containing c next to the number 4. See example below. Fill in only one square per question and make sure you completely rub out any mistakes so that the answer is clear.

Example:-

4.	a	b		d
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<p>Match the words given in (a) – (d) with the clues supplied in questions 1-4.</p> <p>(a) multiplication (b) divide (c) multiply (d) division</p> <p>1. I am a word. The number of my letters equals 4% of the number of years in two centuries and I am synonymous with increase.</p> <p>2. I produce a quotient.</p> <p>3. I am a word. The number of my letters equals the square root of one gross plus two.</p> <p>4. I am the opposite of (c).</p>	<p>5. What is the prime factorisation of 150?</p> <p>(a) $2 \times 2 \times 5 \times 7.5$ (b) $2 \times 3 \times 5^2$ (c) $3 \times 5 \times 10$ (d) $2 \times 3 \times 5$</p> <hr/> <p>6. Cynthia is twice as old as her little sister. What expression can be used to find Cynthia's age if x represents her sister's age?</p> <p>(a) $2 + x$ (b) $x \div 2$ (c) $2x$ (d) $x - 2$</p> <hr/> <p>7. If $6y - 2 = 10$, then what is the value of y?</p> <p>(a) 0 (b) 1 (c) 3 (d) 2</p>
<p>8.</p> <div style="text-align: center;"> </div> <p>Jeremy is drawing a RIGHT TRIANGLE on the grid above. He has marked two of the vertices of the triangle. Which could be an ordered pair for the third vertex?</p> <p>(a) 5, 4 (b) 1, 1 (c) 6, 4 (d) 5, 2</p>	<p>9. The numbers 1 – 8 must each be used only once so that the sum of the three numbers along each side of the square is 12.</p> <p>What is the value of the number in the circle marked A?</p> <div style="text-align: center; margin: 10px 0;"> </div> <p>(a) 1 (b) 4 (c) 6 (d) 8</p>
<p>10. Senzo estimates that there are 9 minutes of advertisements for every 60 minutes of television that he watches. Based on his estimation, how much time <u>without adverts</u> would there be in five hours?</p> <p>(a) 45 minutes. (b) Three quarters of an hour. (c) 51 minutes. (d) Four and one quarter hours.</p> <div style="text-align: right; margin-top: 10px;"> </div>	<p>Decide whether the answers to questions 11 and 12 should be:</p> <p>(a) yes, or (b) no.</p> <hr/> <p><i>Hint: An isosceles triangle has 2 sides of equal length and 2 equal angles. An obtuse angle is larger than a right angle.</i></p> <hr/> <p>11. Is it possible to draw a right angled isosceles triangle?</p> <hr/> <p>12. Is it possible to draw an obtuse angled isosceles triangle?</p>