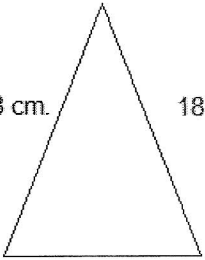


Math 10 - Exam 1

Name

Key

For each problem, perform the operation or answer the question, showing work for possible partial credit. Fraction answers should be reduced where possible, unless otherwise stated.

<p>1. For 5,981,247</p> <p>a) What digit is in the ten thousands place? <u>8</u></p> <p>b) What digit is in the hundreds place? <u>2</u></p>	<p>2. $500 - 47 =$</p> $\begin{array}{r} 49 \\ 500 \\ - 47 \\ \hline 453 \end{array}$
<p>3. $381 \div 4 =$</p> $\begin{array}{r} 95 \frac{1}{4} \\ 4 \overline{) 381} \\ \underline{36} \\ 21 \\ \underline{20} \\ 1 \end{array}$	<p>4. $56 \times 3000 =$</p> $\begin{array}{r} 56 \\ 3000 \\ \hline 168,000 \end{array}$
<p>5. Find the perimeter of the triangle:</p>  <p>18 cm. 18 cm.</p> <p>11 cm.</p> <p>$P = 18 \text{ cm} + 18 \text{ cm} + 11 \text{ cm} = 47 \text{ cm}$</p>	<p>6. Write the related operation or word in the blank.</p> <p>The result of <u>addition</u> is a sum.</p> <p>The result of subtraction is a <u>difference</u></p> <p>The result of multiplication is a <u>product</u></p> <p>The result of division is a <u>quotient</u></p>
<p>7. Simplify: $7 + 2(4) - 3^2$</p> $\begin{aligned} & 7 + 2(4) - 9 \\ & = 7 + 8 - 9 \\ & = 15 - 9 = 6 \end{aligned}$ <p style="text-align: right;">$3 \cdot 3 = 9$</p>	<p>8. Round 58,319 to</p> <p>a) the nearest ten thousand</p> <p style="text-align: center;"><u>60,000</u></p> <p>b) the nearest hundred</p> <p style="text-align: center;"><u>58,300</u></p>

<p>9. Rent for an apartment is \$840/month. If 3 friends share the rent, how much does each person pay each month?</p> $ \begin{array}{r} 280 \\ 3 \overline{) 840} \\ \underline{-6} \\ 24 \\ \underline{24} \\ 0 \end{array} \rightarrow \$280 $	<p>10. Write "yes" or "no" after each number if 7038 is divisible by it.</p> <p>2 yes (it's even)</p> <p>3 yes $7+3+8=18$ div. by 3</p> <p>4 no 38 not div. by 4</p> <p>5 no doesn't end in 0,5</p>
<p>11. Solve: $x - 19 = 43$</p> $ \begin{array}{r} +19 \quad +19 \\ x = 62 \end{array} $	<p>12. Estimate each number to the nearest hundred and add:</p> $ \begin{array}{r} 7387 + 15,239 \\ \approx 7400 + 15200 \\ \hline 22,600 \end{array} $
<p>13. Divide: $\frac{7}{10} \div \frac{4}{5}$</p> $ \frac{7}{10} \cdot \frac{5}{4} = \frac{7}{8} $	<p>14. Multiply: $\left(\frac{9}{10}\right)\left(\frac{5}{21}\right)$</p> $ \begin{array}{r} 3 \quad 1 \\ \left(\frac{9}{10}\right) \left(\frac{5}{21}\right) = \frac{3}{14} \\ \underline{3} \quad \underline{1} \\ 2 \quad 7 \end{array} $
<p>15. Simplify:</p> $ \frac{31}{31} = 1 \qquad \frac{12}{0} = \text{undefined} $	<p>16. Write the prime factorization of 40.</p> $ \begin{array}{c} 40 \\ / \quad \backslash \\ 10 \quad 4 \\ / \backslash \quad / \backslash \\ (2)(5) (2)(2) \end{array} \qquad \boxed{40 = 2^3 \cdot 5} $
<p>17. Find the least common multiple of 15 and 12.</p> $ \begin{array}{c} 4 \quad 3 \\ / \quad \backslash \\ 2 \quad 2 \end{array} \qquad \begin{array}{c} 3 \quad 5 \\ / \quad \backslash \\ 3 \quad 5 \end{array} $ $ \text{LCM} = 2^2 \cdot 3 \cdot 5 = 4 \cdot 3 \cdot 5 = 60 $	<p>18. Convert to a mixed numeral:</p> $ \frac{87}{5} $ $ \begin{array}{r} 17 \frac{2}{5} \\ 5 \overline{) 87} \\ \underline{-5} \\ 37 \\ \underline{-5} \\ 35 \\ \underline{35} \\ 0 \end{array} $
<p>19. Subtract:</p>	<p>20. Write an equivalent fraction with the</p>

