



Questions

Grades 4 - 6

79. A palindromic number reads the same forwards as backwards. For example: 88, 373, 6776. How many palindromic numbers are there between 10 and 200?
80. Three equal fractions such as $\frac{3}{6} = \frac{7}{14} = \frac{29}{58}$ uses all nine digits 1, 2, 3, 4, 5, 6, 7, 8, 9 once and only once. Find two 2-digit numbers, ab and cd , so that $\frac{3}{6} = \frac{9}{18} = \frac{ab}{cd}$ also use these nine digits.
81. John is taller than Henry. Henry is shorter than Mike. Mike is older than Richard who is John's older brother. The heights of the boys are such that the older they are, the shorter they are. The second tallest boy is _____.
82. The arrangement $\begin{matrix} a & b \\ c \end{matrix}$ means $a - (b \times c)$. For example, $\begin{matrix} 7 & 2 \\ 3 \end{matrix}$ means $7 - (2 \times 3) = 7 - 6 = 1$. Find the number $\begin{matrix} 21 & 6 \\ 3 \end{matrix} + \begin{matrix} 30 & 3 \\ 7 \end{matrix}$ represents.
83. Mr. Roberts has 20 students in his class. He has enough balloons to give each student 3 balloons. Ten students want only one balloon each. How many balloons can Mr. Roberts give to each of the remaining students if he wishes each of them to have the same number of balloons?
84. Debbie has 42 marbles and Chris has 24 marbles. How many marbles should Debbie give to Chris so that they both have the same number of marbles?
85. Phil had 2 quarters, 1 dime and 3 pennies. Paul had 2 nickels. Phil gave 3 of his coins to Paul. Paul then had 1¢ more than Phil. What 3 coins did Phil give to Paul?
86. Amy ran around the track 3 times for a total of 810 meters. The track distance from B to C is 80 meters and from D to A is 50 meters. The distance from A to B is the same as from C to D. The distance from A to B is _____ meters.

