

Warm-Up 12



161. 100 ft A rectangular swimming pool, shown here, is surrounded by a concrete deck that is 5 ft wide. The length of the pool is 1.5 times its width, and its area is 216 ft^2 . What is the outside perimeter of the deck?




162. 3:45 pm A subway arrives at the station every 25 minutes. A train arrives at the station every 45 minutes. If the subway and the train each arrive at noon, at what time will they next arrive at the station together?

163. 36 hours Working together, Tom and Dick can dig 3 holes in 6 hours. Knowing Tom digs twice as fast as Dick, how many hours would it take Tom, working alone, to dig 12 holes?

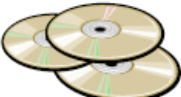


164. 141 times The pages in a book are numbered from 1 to 363. How many times does the digit 3 appear as part of a page number of this book?

165. 20 squares  How many squares can be formed on a 16-pin rectangular geoboard?

166. 42.2 In a sequence of five positive integers, each term after the first term is determined by multiplying the preceding term by 1.5. If the median of the five terms is 36, what is the mean of the five terms? Express your answer as a decimal to the nearest tenth.

167. 9 years old The sum of Madison's age and 3 times Harper's age is 47 years. In 2 years Madison will be twice as old as Harper. How old is Harper?

168. 4 dollars  Andie bought 3 oldies CDs and 2 current CDs for \$78. Deanne bought 2 oldies CDs and 3 current CDs for \$82. What is the positive difference in the price of an oldie CD and the price of a current CD?

169. 16 integers For how many positive integers containing no digit of zero is the sum of the digits equal to 5?

170. $\sqrt{73}$ units In $\triangle ABC$, shown here, the measure of $\angle BCA$ is 90° , $AC = 12$ units and $BC = 9$ units. If D is a point on hypotenuse \overline{AB} , such that $AD = 5$ units, what is the length of segment CD ? Express your answer in simplest radical form.

