of granite, containing 373243 solid inches: what is the length of one of its sides?

Examination XLIII(b), June 17 1880.

1070. Express in words: 5000000750001.
1071. If the product of two numbers is 346712, and one of the factors is 76, what is the other factor?
1072. What is Cancellation?
1073. Find the least common multiple of 4, 14, 28, and 98.
1074. The product of 3 numbers is $\frac{8}{9}$: two of the numbers are $2\frac{1}{2}$ and $\frac{7}{9}$: what is the third?
1075. What is the sum of six-millionths, four ten-thousandths, 19 hundred-thousandths, sixteen-hundredths, and four-tenths?
1076. Reduce $\frac{5}{4} \cdot 16.125$ to a decimal fraction.
1077. Make a receipted bill of the following articles as if sold to John Smith by yourself:
   16 lbs. of tea, at $.85 per lb.
   23 " " coffee, at $.25\frac{1}{2} per lb.
   15 Yards of linen, at $.66 per yard.

1078. How many acres are there in 250 city lots, each of which is 25 feet by 100?
1079. Add 96 bu. 3 pk. 2 qt. 1 pt., 46 bu. 3 pk. 1 qt. 1 pt., 2 pk. 1 qt. 1 pt., and 23 bu. 3 pk. 4 qt. 1 pt.
1080. By the chronometer, it is 4 hr. 56 min. $4\frac{1}{16}$
sec., P.M., at Greenwich, when it is 12 M. at New York; what is the longitude of New York?

1081. \(\frac{1}{4}\) of \(\frac{3}{4}\) is what part of \(\frac{1}{4}\)?

1082. How many pounds of thread will it require to make 60 yd. of 3 qr. wide, if 7 lb. make 14 yd. 6 qr. wide? (Solve by double rule of three).

1083. What is the difference between \(5\frac{1}{2}\) per cent. of \$800, and \(6\frac{1}{2}\) per cent. of \$1050?

1084. If I sell a piano, which cost \$275, for \$315, what is the rate per cent. of gain?

1085. What amount of government stock can I buy for \$15525, when it sells at \(3\frac{1}{2}\) per cent. premium?

1086. What is the simple interest of \$3750.87, for 2 years and 9 months, at 8 per cent.?

1087. The interest of \$3675, for 3 years, is \$771.75: what is the rate?

1088. What is the amount, at compound interest, of \$350, for two years, at 8 per cent.?

1089. What is the bank discount of a note of \$1000, payable in 60 days, at 6 per cent. interest?

1090. A man who has only \$50, owes \$75 to A, \$150 to B, and \$100 to C: what should he pay to each?

1091. Find the 4th power of 16.

1092. What is the square root of 26883381?

1093. How many small cubes, of 2 inches on a side, can be sawed out of a cube 2 feet on a side, if nothing is lost in sawing?

1094. How many bricks, 8 inches long and 4 inches wide, will pave a yard that is 100 feet by 50 feet?

1095. There was a company of soldiers, of whom \(\frac{1}{4}\) were on guard, \(\frac{1}{2}\) preparing dinner, and the remain-
der, 55 men, were drilling: how many were there in all?

1096. A wall of 700 yards in length, was to be built, in 29 days; 12 men were employed on it for 11 days, and only completed 220 yards: how many men must be added, to complete the wall in the required time?

1097. If a house is 50 feet wide; and the post which supports the ridge-pole is 12 feet high, what will be the length of the rafters?

Examination XLIV. Nov. 11, 1880.

1098. Copy and add:

\[
\begin{array}{c|c|c|c|c|c|c|c|c|c}
& 5.67 & 6.78 & 2.91 & 2.62 & 3.78 & 6.00 & 1.07 & 1.15 & 6.78 & 3.61 \\
5.28 & 6.12 & 1.37 & 4.32 & 6.21 & 5.00 & 1.78 & 2.86 & 4.45 & 4.78 \\
\end{array}
\]

1099. From—

100200300400500600 take 908070605040302.

1100. Divide 4500700424 by 407.

1101. What is the value of 17 chests of tea, each containing 59 lbs., at $0.67 per lb.?

1102. For what is Troy weight used?

1103. Give the table of Troy weight.

1104. In 56 m. 7 fur. 37 rd. 12 ft. 9 in. how many inches?

1105. How many cords in a pile of wood 15 ft. long, 4 ft. wide and 6\(\frac{1}{2}\) ft. high?

1106. John Quincy Adams was born July 11, 1767, and died February 23, 1848. To what age did he live?