985. On what month and day must a note for 30 days, dated May 20, 1879, be paid, or in default of payment, be protested?

Examination XL.   Nov. 6, 1879.

986. What number divided by 453 gives 307 as a quotient, and 109 as a remainder?

987. How does a divisor of a number differ from a multiple of that number?

988. Find the greatest common divisor of 56, 140, 182, and 98.

989. What are the prime factors of 11970 ?

990. Explain the principle (not process) of cancellation, and illustrate by an example.

991. What change do we make in the value of a fraction if we take the same number of parts but diminish their size?

992. 3050-5940=17-33.   Why?

993. Prove that .625 = $\frac{5}{8}$.

994. A vat 13 ft. square contains 1224 cu. ft.   How deep is it?

995. Change .0000625 mi. to decimal of a foot.

996. (24 × $\frac{3}{9}$ or 7) × ($\frac{5}{9}$ of 3 × $\frac{4}{15}$) = what?

997. The volume of a cube contains 91125 cu. ft. What is the length of each edge of the cube?

998. How many sq. ft. in the entire surface of a cube, each edge of which is 75 ft. ?

999. I have an acre of land in shape of a rectangle, one side of which is 9 rods in length.   What is the length of the other side?

1000. $\dfrac{4\frac{2}{3} \times 5 \ 1\text{-}7 \times 8}{28\frac{1}{2} \ \div \ 7\frac{1}{5}} =$ what?

1001. The time at a certain place is 16 h. 10 m. earlier than at Greenwich. Give the longitude of the place.

1002. I have a rectangular field which measures 25 rods by 10 rods. At $0.40 per yard, what will be the cost of boundary fences for the entire field?

1003. What will be the total cost, at the same rate as in Q. 1002, of cross fences to divide the same field into lots 5 rods square? Make a small diagram of the field and its subdivisions.

1004. In a school of 300 pupils, the boys are to the girls in the ratio of 13 to 17; required the number of each.

1005. If I sell goods at one-half their cost, what per cent do I lose, and if at double their cost, what per cent do I gain?

1006. If 18 men can dig a trench 30 yd. long in 5 da. of 8 h. each, in how many days of 10 h. each can 10 men do the same work?

1007. Show that $\frac{11}{2880}$ ℔. Troy $= \frac{11}{12}$ pwt.

1008. From $\frac{2}{3}$ of a day take $\frac{7}{8}$ of an hour, leaving result in hours, minutes and seconds.

10 9. What will be the amount in three years of $625, compounded at 7%, annually?

1010. In what time will $240 amount to $720, at 12% simple interest?

1011. Find the proceeds of a note for $1255.38, payable in 4 mo. 12 da., discounted at bank, interest being at 6%.

1012. What is the present worth of a note for $1315.29, due in 2 years and 6 months, at 7%?

1013. Sold a horse for $91, which was $\frac{7}{9}$ of what he cost me. How much did I lose?

Examination XLI, Feb. 26, 1880.

1014. The quotient of one number divided by another is 37, the divisor 245, and the remainder 230; what is the dividend?

1015. Two men start from different places, distant 189 miles, and travel toward each other; one goes 4 miles, and the other 5 miles an hour; in how many hours will they meet?

1016. A merchant sold 18 barrels of pork, each weighing 200 pounds, at 12 cts. 5 mills a pound; what did he receive?

1017. Suppose a certain township is 6 miles long and $4\frac{1}{2}$ miles wide, how many lots of land of 90 acres each does it contain?

1018. What are the prime factors of 1800?

1019. Find the greatest common divisor of 1426, 322, and 598.

1020. What is the least common multiple of 9, 17, 6, and 27?

1021. Add $21\frac{4}{7}$, $32\frac{3}{8}$, and $47\frac{5}{14}$.

1022. $\left\{ \text{Reduce } \dfrac{18 \div \frac{1}{5}}{9 \times \frac{1}{4}} \text{ to its simplest form.} \right.$

1023. How many times is .12 of 12 contained in .24 of 72?

1024. How many pounds of coffee, at $33\frac{1}{4}$ cents per pound, can be bought for $14.50?