Examination XXII. Nov. 6, 1873.

505. Find the sum $\frac{4}{9}$ of $9\frac{3}{5}$ and $\frac{1}{9}$ of $23\frac{1}{2}$.

506. Find the difference between $3\frac{1}{2} + 7\frac{3}{8}$ and $4 + 2\frac{3}{8}$.

507. The product of three factors is $19\frac{1}{2}$, and two of them are $\frac{3}{8}$ and $\frac{5}{7}$; what is the other?

508. Divide $0.5$ of $1.75$ by $0.25$ of $17\frac{3}{4}$.

509. What is the value of $6\frac{3}{8}$ divided by $8\frac{5}{8}$, as a simple fraction?

510. What is the value of $0.815625$ of a pound Troy expressed in oz. pwt. and gr.?

511. Reduce 4 da. 4 hr. 48 mi. to the decimal of a week.

512. A person owned $\frac{4}{9}$ of a mine and sold $\frac{3}{9}$ of his interest for $1,710$: what was the whole cost?

513. Sold $9\frac{5}{8}$ cwt. of sugar at $\frac{5}{8}8$ per cwt., and thereby lost 20 per cent: what was the whole cost?

514. A man, owning $\frac{9}{10}$ of a bank, sold 35 per cent. of his share: what per cent. of the whole was left?

515. A's property is assessed at $6,750$, and B.'s at $13,550$. A.'s tax is $55.35$: how much is B.'s?

516. How many acres could 10 men plough in 14 hours if 7 men ploughed 6 acres in $12\frac{1}{2}$ hours?

517. What is the simple interest on $200$ for 3 yr. 10 mo. at 7 per cent?

518. In 1 yr. 4 mo., $311.50$ amounted to $348.88$, at simple interest; what was the rate per cent?

519. What is the amount of $1,000$ for 7 yr. 10 mo. 18 da., at 6 per cent. simple interest?

520. What sum, at 9 per cent., simple interest, will amount to $286.00$, in 3 yr. 4 mo.?
521. A note for $470.66, drawn at 60 days, is discounted at bank at 6 per cent: what are the proceeds?

522. What is the amount of $50, at compound interest for 3 yr. at 8 per cent., interest payable half-yearly?

523. J. Ayres has D. Howe's note for $1,728, dated Dec. 29, 1869: what was the amount Oct. 9, 1873, at 9 per cent., with interest from date?

524. What is the value in currency of $865 in gold, when the latter is selling at 107 per cent.?

525. How much gold will $100 currency buy, gold being at 111?

526. Suppose that you buy of D. Appleton & Co. of New York, 5 reams of note paper, at $3.25 per ream; 4,500 envelopes, at $4.75 per M.; 24 boxes of steel pens, at $1.12½ per box; 6 French dictionaries, at $1.50 each; and 3 photographic albums, at $5.75 each. Make a bill for D. Appleton & Co., against yourself, in regular form.

527. A man had a yard 33 ft. long and 27 ft. wide; he reserved two grass plats, each 8 ft. square, and had the rest paved with stone, at 45cts. a sq. yd.: what did the paving cost?

528. How much will it cost to dig a cellar 40 ft. long, 32 ft. wide, and 5 ft. deep, at $0.25 a cubic yard?

Examination XXIII. Feb. 26, 1874.

529. Find the smallest number which will exactly contain 9, 15, 18, 20.