620. A boy bought eggs at the rate of 3 for 5 cts., and sold them at the rate of 4 for 7 cts., clearing 9 cts.: how many did he buy?

(Solve by analysis.)

621. A commission merchant sold 500 pieces of cloth for $30 a piece, and paid the owner $14,700: what was the rate of his commission?

622. A store was insured for $12,000 at the rate of ¾ per cent., and the goods for $15,000, at 1¼ per cent: what was the entire premium?

623. What will be the proceeds of a note for $1,000, without interest, payable at bank in 60 days, at 6 per cent?

624. A man being asked his age, replied, if you add to its half, its third and three times three, the sum will be 130: what was his age?

Examination XXVII. June 3, 1875.

625. The quotient is 71, the divisor 42, and the remainder 15: what is the dividend?

626. What will be the cost of 2,760 ℔. of hay at $8.50 per ton?

627. From 17½ take ⅗ of 16¼, and multiply the remainder by ⅞.

628. A lady bought 6 silver spoons, each weighing 3 oz. 3 pwt. 8 gr., at $2.25 an oz., and a gold chain weighing 14 pwt. at $1.25 a pwt.: what was the cost of both spoons and chain?

629. From 15 ten-thousandths take 27 millionths, and multiply the difference by 20.5.

630. Reduce 6.25 of a pound Troy to lower integers.

631. How many seconds are there in the three summer months?

632. How many acres are there in a street 4 rods wide, and 2¼ miles long?

633. Reduce 4s. 6d. to the decimal of a £ sterling.

634. A quantity of sugar was bought for $150, and sold for $167.50: what was the gain per cent?

635. Mrs. C. B. Jones bought of Cole, Steel & Co., of Detroit, as follows: Nov. 12, 1874, 23 yd. calico, @ 16c.; 45 yd. sheeting, @ 20c.; Dec. 7, 12 yd. silk, @ $1.62½; 8 handkerchiefs, @ 45c.; 2 pairs kid gloves, @ $1.87½. Make bill for Jan. 1, 1875, and receipt the same, as clerk of the firm.

636. What is the interest of $125.50 for 7 mo. 10 da. at 7 per cent?

637. A note for $500, dated Oct. 8, 1873, and bearing interest at 9 per cent., is endorsed as follows: Nov. 4, 1874, $30; Jan. 30, 1875, $250. What will be due July 1, 1875?

638. What is the true discount on $236, due in 3 years, at 6 per cent?

639. What is the bank discount on $125 payable in 90 days, at 8 per cent?

640. Two men divided a lot of wood costing $81, one taking 5½ cords, and the other the remaining 8 cords: what must each pay? (Solve by analysis.)

641. What is the square root of 416.16?

642. How many gallons of water will a cistern hold which is 7 ft. long, 6 ft. wide, and 11 ft. deep?

643. A. can mow 2 acres in 3 days, and B. 5 acres in 6 days: in how many days can they together mow 9 acres?

644. A house valued at $3,240 is insured for ⅔ of its value, at ¾ per cent.: what is the premium?

645. How many bricks will it require to build a wall 2 rd. long, 6 ft. high, and 18 in. thick, each brick being 8 in. long, 4 in. wide, and 2½ in. thick?

646. If the wages of 24 men for 4 days are $192, what will be the wages of 36 men for 3 days?

(Solve by double proportion and cancellation.)

647. At what rate per cent. will $311.50 amount to $337.40 in 1 year. 4 mo.?

648. What will it cost to lay a pavement 36 ft. long, and 9 ft. 6 in. wide, at 40 cts. a sq. yd.?

Examination XXVIII. Nov. 4, 1875.

649. Express in words the number: 42567000129301.

650. Multiply five hundred and forty thousand six hundred and nine, by seventeen hundred and fifty.

651. Give the rule for reduction ascending (*i. e.* from lower to higher denominations), and state how this process chiefly differs from reduction descending.

652. How many steps of two and one-half feet each, would a man take in walking five miles?

653. How is a whole number reduced to a fraction of the same value, having a given denominator?