compound interest for 2 years, at 6 per cent. per annum?

731. What is the annual premium on a policy which insures a house worth \$12,000 for  $\frac{5}{6}$  its value, at  $\frac{1}{2}$  per cent.?

732. Amount \$103.81, on \$74.50, at 10 per cent. What is the time?

## Examination XXXII. March 1, 1877.

733. Name the first six periods in numeration.

734. Express in figures: one trillion six thousand.

735. 1 million 400 thousand and 50+15 hundred+25 thousand+120 thousand 6 hundred and 14=?

736. The subtrahend is 2603.46, and the remainder is 72.804; what is the minuend?

737. The factors of a number are 7300.96 and 5.006: what is the number?

738. The dividend is 39314.76, and the quotient is 7,071: what is the divisor?

739. What operations may be performed on the terms of a fraction without altering its value?

740. If the numerator be equal to the denominator, what is the value of the fraction?

741. How does multiplying the numerator affect the value of a fraction?

742. How does multiplying the denominator affect the value of a fraction?

743. Change 121 to an improper fraction.

744. Reduce  $\frac{2}{5}$  of  $\frac{4}{6}$  of  $\frac{7}{10}$  of 15·17 to a simple fraction.

745. Multiply 8-15 of 121 by 1-5 of 71.

746. Divide \( \frac{2}{4} \) of 1\( \frac{1}{2} \) by \( \frac{2}{3} \) of \( \frac{1}{2} \).

747. In what terms of multiplication may equal factors be cancelled?

748. In what terms in division may equal factors be cancelled?

749-750. A note for \$250, dated June 5, 1874, was paid Feb. 14, 1875, with simple interest at 8 per cent. What was the amount? (Two credits.)

751. What is Ratio?

752. How is Ratio expressed?

753. What is Proportion?

754. How is Proportion expressed?

755. What are the 1st and 3d terms of a Proportion called?

756. What are the 2d and 4th terms of a Proportion called?

757. What are the extremes of a Proportion, and what the means?

758. Given the means and one extreme of a Proportion, how may the other extreme be found?

759. Given the first, second and fourth terms of a Proportion, how may the third be found?

760. In the question: If 4 tons of coal cost \$24, what will 12 tons cost, what is the given ratio?

761. If 4 tons of coal cost \$24, what will 12 tons cost? (Solve by proportion.)

762. Change  $\frac{4}{7} = \frac{12}{21}$  to the form of a proportion.

763—764. Albany is 73° 44′ 50″ West Longitude: San Francisco is 122° 26′ 45″. When it is noon at Albany, what is the time at San Francisco? (Two credits.)

765. What will \$864.50 amount to in two years at 8 per cent. compound interest?

766. If 10 tons of hay will support 5 horses 8 mo., how many horses will 18 tons support one year?

(Solve by double proportion.)

767. How many men will be required to build 32 rods of wall in the same time that 5 men will build 10 rods? (Solve by analysis.)

## Examination XXXIII. June 7, 1877.

768. What are the 3 terms in multiplication called?

769. What are the 3 terms used in division called?

770. What are the first and second terms in multiplication taken together called?

771-772. To what terms in multiplication do the terms in division correspond?

773. How many partial products will there be, if the multiplier consists of several figures?

774. Given 73654 a multiplicand, and 4365 a multiplier, what is each successive multiplier, expressed in words?

775. Multiply 73564 by 4365, and express each partial product  $in\ words$ .

776. Multiply 73654 by 4365, giving the entire work.

777. To what, in division, does the numerator of a fraction correspond?

778 To what in division does the denominator of a fraction correspond?