## COLLEGIATE INSTITUTES AND HIGH SCHOOLS.

ENTRANCE EXAMINATION, JUNE 27th and 28th, 1876.

Examiners, County (City or Town) Inspector (or in certain cases a person appointed by him), Presiding Examiner.

Chairman of the High School (or Collegiate Institute) Board.

Chairman of the Public School Board.

Head Master of the High School (or Collegiate Institute).

No. 1.

## ARITHMETIC.

## N. B.—FULL WORK REQUIRED.

- 1. Bought  $19\frac{1}{2}$  yds. Irish linen at 5/4;  $16\frac{3}{4}$  yds. calico at  $\frac{1}{8}$ , and  $16\frac{1}{2}$  yds. silk at 8/4; find the amount of the bill in dollars and cents.
- 2. Add together  $\frac{3}{4}$  of  $\frac{5}{6}$  of £2 5s.,  $\frac{3}{7}$  of 3 guineas, and 27 of £1 18s. 6d., and reduce the result to the decimal of £25.
- 3. If a pipe discharge 2 hhd. 23 gal. 2qt. 1pt. of water in one hour, in how many hours will it discharge 11 hhd. 25 gal. 13 pt., the water flowing with the same velocity?

4. Add together, 
$$\frac{16}{\frac{1}{15}}$$
 of  $2\frac{3}{17} \times \frac{1}{3}\frac{1}{5}$ ,  $\frac{\frac{1}{27}}{1^{\frac{2}{5}}}$  of  $3\frac{3}{10}$   $\times \frac{1}{17}$ , and divide the result by  $\frac{3^{\frac{2}{3}}}{63}$  of  $5\frac{1}{4}$  of  $7\frac{1}{2}$   $\frac{1}{3\frac{1}{2}}$   $\frac{\frac{4}{7} \times 7^{\frac{2}{3}}}{\frac{1}{3}}$ 

5. A man's annual income is \$2,400; find how much he may spend per day so that after paying a tax of 2 cents 7½ mills on every dollar of income he may save \$582 a year (365 days).

- 6. A room is 36 feet long and 24 feet wide; find the difference in the expense of carpeting it with carpet a yard wide at \$1.40 a yard, and with carpet 27 inches wide at \$1.15 a yard.
- 7. If 162 gallons of water will fill a cistern 4 ft. 4 inches long, 2 ft. 8 inches broad, and 2 feet 3 inches deep, how many cubic inches are contained in a pint?
- 8. Three men can mow a field in 6 days; they mow together for two days and then one of them ceases work, and the other two finish the field in 7 days; find how long the man who ceased work at the end of the second day would have taken to mow the whole field by himself.
- 9. A man sold two city lots for \$600 each; on the one he gained \(\frac{1}{4}\) of the price it cost him, and on the other he lost \(\frac{1}{4}\) of the price it cost him; find his entire loss on the sale of the two lots.
- 10. A drover bought a number of cattle for \$4,375, and sold a certain number of them for \$43 a head for the total sum of \$3,655. gained \$680, for how much per head must he sell the remainder so as to gain \$400 more.

NOTE.—Ten marks for each question.