Tapa-kakahu then returned home, and taking his dog-skin mat, put it on, and started off to follow the shoal of *kahawai*, which proceeded along outside in the sea whilst the man ran along the shore repeating his *karakias* as he went. He knew well that the shoal of *kahawai* was going to Motu, which river is the source of all the *kahawai* in the seas of this island, and where is the *mauri* of the *kahawai*. It is a rock in the river, and is a *tupua*. He also knew that in all probability Te Whanau-a-Apanui would be fishing with the net for the shoals of *kahawai*, and, may be, that great *kahawai* that took his hook would be caught.

5. Translate into English—

Kua hui katoa nga iwi me nga toa-taua, mai tona kainga o Kawhia mai, a, tae noa mai ki a Te Ati-awa. Koia ra tenei ka haere nei tenei ope—ko te nuinga i tika ma runga waka, ka ahu ma te moana—ko Ngati-Koata ia. Ko Te Whare-o-te-riri i tika ma uta, ma te maunga e karangatia nei ko Maunga-tawhai. Ka tae taua ope ki Kaiapohia, rokohanga atu kua tae katoa nga iwi nei, kei te karapoti i te pa o Ngai-Tahu. Ka mahara a Ngati-Koata, e ! me pehea ra e horo ai taua pa-teko. Katahi ka keria haeretia e ratou i te whenua; a ka tata noa ki te pa, katahi ka mahia ki te rarauhe, ki te manuka, a, ka pae, ka kimihia tetahi tino tohunga; ka kitea tetahi, a, nana i karakia te hau kia whiti ki te hautonga. No te putanga o taua hau katahi ka haria aua rarauhe me nga manuka hei tahu i taua pa-teko. No kona i hinga ai taua pa nui—kaha nei, na te ahi. I te mea e keria ana taua awarua nei ka haere atu tetahi tangata ki reira moe ai. Te makanga mai a te pu ki taua tangata mate tonu atu. No reira te whakatauki nei: "Ka mate te iwi keri parepare, hei aha ma Te Whare-o-te-riri?"

No. 28.—Arithmetic, A.—For Junior National Scholarships and Free Places in Secondary Schools.

Time allowed: Two hours. [*You are to answer, if you can,* all *the first eight questions, and* two only *of the remaining four.*]

1. Find the least number that must be added to three hundred and seven million eight thousand five hundred in order that the sum may be exactly divisible by thirty-seven thousand and eight.

Also find the sum of all the numbers between 200 and 300 that are exactly divisible by 19.

2. In dividing $\frac{6}{7}$ by 3 I either divide the numerator by 3, getting $\frac{2}{7}$, or multiply the denominator by 3, getting $\frac{6}{21}$: draw a diagram to show that the results are equal.

Find in pence the value of $\frac{7}{8}$ of 5s. 9d. $-\frac{3}{16}$ of £1 6s. 1d. $+ 3\frac{1}{12}$ of 4s. 5d.

3. A merchant buys a quantity of butter; three-sixteenths of it is unsaleable, and the rest, sold at 10½d. a pound, realises £362 17s. 3d.: how much butter did he buy?

4. Find by the method of practice the value of 3 cwt. 0 qr. 50 lb. of copper at £64 a ton.

Also, by the same method, find the cost of 857 things at £1 6s. 10d. a hundred.

5. The wheel of a motor car is 30 inches across: how often will it revolve in $3\frac{3}{5}$ minutes when travelling at the rate of 50 miles an hour? [Assume that the circumference is $3\frac{1}{7}$ times the diameter.]

6. My walking-stick, which is 2 ft. 10 in. long, casts a shadow of 6 ft. 8 in. at the same time that the shadow of a tree is 26 yd. 2 ft. 3 in.: find the height of the tree.

7. The working of the sum "What is the interest on £187 for 5 months at $4\frac{3}{4}$ per cent. per annum?" was set out in two steps, without explanation, as follows:—

$$£\frac{19}{4} \times \frac{187}{100}$$

$$£\frac{19}{4} \times \frac{187}{100} \times \frac{5}{12}$$

State as clearly as you can the reasoning on which these two steps are based.

8. A farmer buys a block of land of 1,095 acres 3 roods 10 perches; he finds that 476 acres 3 roods of it is good pasture, the remainder being swamp land and bush: if the area of the swamp land is $2\frac{1}{2}$ times as great as that under bush, what will be the cost of draining the swamp land at £6 10s. an acre?

9. On the 5th December I repaid the sum of £750 which I had borrowed some time before at $7\frac{1}{2}$ per cent. per annum: if the charge for interest was £11 5s., what was the date of the loan?

10. In an arithmetic-book a sum was printed with a number omitted, thus: Simplify $9\frac{3}{4} - 3\frac{5}{8} + 4\frac{1}{12} -$ $+ 10\frac{7}{18}$: if the answer given at the end of the book was $8\frac{1}{3}$, find the missing term.

11. A test was made of the eyesight of the pupils in three schools containing 1,240, 1,160, and 1,075 pupils respectively; in the first school 45 per cent., in the second 30 per cent., and in the third 56 per cent. had weak eyes: find the percentage of pupils with weak eyes in the three schools together.

12. Given that a surveyor's chain contains 100 links, and that 10 square chains make an acre, show that with a little knowledge of decimals you can readily express square links in acres. Express 476875 square links in acres and the decimal of an acre, and reduce the decimal part to roods and perches.

No. 29.—Arithmetic, B.—For Junior National Scholarships and Free Places in Secondary Schools.

Time allowed: Two hours. [*You are to answer, if you can,* all *the first eight questions, and* two only *of the remaining four.*]

1. Show by means of a diagram that $\frac{2\frac{1}{2}}{5} = \frac{1}{2}$; also express the difference between $2\frac{3}{5}$ feet and $6\frac{7}{10}$ inches as the fraction of $3\frac{1}{2}$ yards.

2. A bankrupt whose debts amount to £8,760 can pay only $9\frac{1}{2}$d. in the £: find what he is worth.

3. Travelling at the rate of $6\frac{1}{2}$ miles an hour I can get from Napier to Taupo in $15\frac{3}{4}$ hours: what must be my speed if I return in $9\frac{3}{4}$ hours?