

an annuity of £50. for 12 years, to commence when he comes of age, the executors think it will be more advantageous to exchange this for an annuity to commence immediately, and continue till he is 21, to enable them to give him some education and a trade. What will be such annuity, £100. being reserved at the conclusion to set him up in business?

(20) There is an island 73 miles in circumference, to travel round which three pedestrians all start at the same time: A travels 5 miles a day, B travels 8, and C 10 miles a day. In how many days will they all come together again, and how many circuits will each have made?

(21) What will a banker charge for discounting a bill of £52..10. on the 7th of April, the bill being due on the 19th of May?

(22) My agent in London having advised me that he has purchased goods on my account to the amount of £756..10. at six months' credit, or $£7\frac{1}{2}$. per cent. discount for prompt payment, if I send a remittance of £400. to be paid down on account, after deducting out of it his charge for commission at $£2\frac{1}{4}$. per cent., what will remain to be discharged at the end of six months?*

(23) If I insure a house for £250. at the annual charge of 1s. 6d. per cent., and the furniture, &c., for £150. at the rate of 4s. 6d. per cent., what shall I have to pay yearly to the Insurance office, including the duty paid to Government of $\frac{1}{8}$, or 2s. 6d. per cent.?

(24) If 12 oxen will eat $3\frac{1}{2}$ acres of grass in 4 weeks, and 21 oxen will eat 10 acres in 9 weeks, how many oxen will eat 24 acres in 18 weeks, allowing the grass to grow uniformly?
Newton.

(25) A bath is supplied with water by two cocks, from one of which it may be filled in 40 minutes, and from the other in 50 minutes: a discharging cock will empty it (when filled) in 25 minutes. If all the three be opened at the same time, in what time will the bath be filled, supposing the influx and efflux to be uniform?

(26) A person who had spent two-thirds of his money at one place, and half the remainder at another, found that he had £32..12. left. How much had he at first?

(27) The length, breadth, and height of a room are 16

* See Note to Example 11, Discount, page 71.