

- (68) What is the annual rental of a freehold estate purchased for £3000 when the rate of interest is at 4 per cent? Ans. $A = £120$.
- (69) If a perpetuity of £563 can be purchased for £11260 ready money, what is the rate of interest allowed? Ans. $r = 5$ per cent.
- (70) A freehold estate producing £75 per annum, is mortgaged for the period of 14 years; what is its present value reckoning compound interest, at 4 per cent? Ans. $v = £1082$ 15s. 4d.

MENSURATION.

- (71) How many acres are there in a square field whose side is 809 links? Ans. $A = 6$ acres, 2 roods, $7\frac{1}{2}$ poles.
- (72) What is the side of a square whose area is 3025 yards? Ans. $s = 55$ yards.
- (73) What is the area of a square room whose diagonal is 31 feet? Ans. $A = 480\frac{1}{2}$ feet.
- (74) Required the diagonal of a square table whose area is 16 square feet? Ans. $d = 5.65685$ feet.
- (75) Find the number of square inches in a sheet of paper whose length is 11 inches and breadth $8\frac{1}{2}$ inches. Ans. $A = 93\frac{1}{2}$ inches.
- (76) If the area of a rectangle, whose perpendicular is 11 yards, be 2112 yards, how long is its base? Ans. $b = 192$ yards.
- (77) The area of a rectangular pond is 43750 square yards, one side is 350 yards, what is the length of the other? Ans. $P = 125$ yards.
- (78) Find the area of a rectangle whose base is 21 and diagonal 35 yards. Ans. $A = 588$ yards.
- (79) Find the area of a parallelogram whose base = 90, and perpendicular height = $12\frac{1}{2}$ feet. Ans. $A = 1125$ feet.
- (80) Required the area of a triangle whose base = 81 feet, and altitude 46 feet. Ans. $A = 1863$ feet.