

IN THE HIGH SCHOOL ARITHMETIC.

200,000 sq. m ; and the thickness is .03 m. $\therefore$ vol. = 200,000 $\times$.03 sq. m.

34. No. of sq. m to be painted = $5 \times 4 + 2(5 + 4) \times 3.5 = 83$;
1 sq. m (= 10 milliares) cost \$7.50. $\therefore$ whole cost = \$622.50.

35. A side of the field measures 10 m. $\therefore$ area of field = 100 sq. m = 1 a.

36. If the length and breadth are 3 and 2 units respectively the area is 6 sq. units. $\therefore$ 1 sq. unit = 4 Ha = 40000 sq. m = $(200)^2$ sq. m. $\therefore$ 1 linear unit = 200 m. $\therefore$ length of field is 600 m, and width 400 m. $\therefore$ diag. is $100\sqrt{5}$ 2, m. = &c.

37. 1 Ha = 100 a = 100^2 sq. m. $100^2 (39.37)^2$ sq. in. = 3937² sq. in. = $3937^2 \div 144 \div 4840$ acres = &c.

38. The path is 60 m long and 1.5 m wide, and $\therefore$ has an area of 90 sq. m = 90 ca.

39. Area = $7 \times 7 \times \frac{22}{7}$ sq. m. = 154 ca = 1.54 a ; smaller portion = $\frac{3}{7}$ of this area = .66 a.

40. 10000 sq. m = 1 Ha = $2\frac{1}{2}$ acres = $12100 \times 9 \times 144$ sq. in. $\therefore$ 100 m = $110 \times 3 \times 12$ in. or 1 m = 39.6 in.

41. The vol. = $3 \times 3 \times 3$ cub. m = 27 s.

42. 1 Ks = 1000 cub. m. $\therefore$ edge = 10 m = 1000 cm.

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43. 1 s = 1 cub. m = $(100)^3$ cub. cm = &c.

44. One million cub. cm = 1 cub. m = 1 s.

45. Vol. = $45 \times 8 \times 1.5$ cub. m = 540 s ; &c.

46. Vol. excavated = $12 \times 10 \times 3.5$ cub. m = 420 s ; &c.

47. 1 ds = 1 s = 1 cub. m = $.1 \times (10)^3$ cub. dm = 100 cub. dm.

48. 1 s = 1 cub. m = $(39.37)^3$ cub. in. = $(39.37)^3 \div 1728$ cub. ft. = &c.

49. 1 s = 35.31 cub. ft. = $35.31 \div 128$ cord = &c.

50. Vol. = $40 \times 30 \times \frac{1}{10}$ cub. m = 24 s.

51. 20 cub. units cost \$54. $\therefore$ 1 cub. unit cost \$2.70 = cost of 27 s. $\therefore$ 1 cub. unit = 27 s = 27 cub. m. $\therefore$ linear unit = 3 m.

52. Vol. of first wall = $15 \times 1 \times 3.4$ cub. m = 51s ; $\therefore$ each stere of wall contains 1000 bricks ; &c.

53. The area of each face of the cube is a centiare $\therefore$ whole surface = 6ca = &c.

54. 1s of earth = $2\frac{1}{2}$ s of water = $2\frac{1}{2}$ cub. m water = $2\frac{1}{2}(100)^3$ cub. cm of water = $2\frac{1}{2}(100)^3$ g = $2\frac{1}{2}(100)^3 \div 1000$ Kg = &c.

55. 1 s ice = $\frac{10}{11}$ s water = $\frac{10}{11}$ of 1000 Kg =.