

### SOLUTIONS OF PROBLEMS

13.  $29.5 \div 39.37 \times 1000.$
14. 10 m = 1000 cm. In taking one-half of one part and two-thirds of the other we have taken one-half the whole string and one-sixth of the other part : but one-half the whole string is 500 cm.  $\therefore$  one sixth of the other part is 100 cm.  $\therefore$  the other part is 600 cm, and the one part is 400 cm.
15. No. minutes =  $65 \text{ Km} \div 80 \text{ m} = 65000 \text{ m} \div 80 \text{ m} = 812.5$   
 $= \&c.$
16. No. revolutions = distance  $\div$  circumference of wheel =  $55000 \text{ m} \div (1.4 \times 2 \times \frac{\pi}{7}) \text{ m} =$
17. 1 yd. =  $\frac{3}{4}$  in.  $\times 36 \times \frac{5}{2} = 1 \text{ cm} \times 36 \times \frac{5}{2} = 10 \text{ mm} \times 36 \times \frac{5}{2} =$
18.  $1 \text{ Km} \div 1 \text{ m } 5 \text{ cm} = 1000000 \text{ mm} \div 1050 \text{ mm}.$
19. No. sq. metres =  $6.175 \times 4.12.$
20. Sq. root of 15227.56 = 123.4.
21.  $1200 \div 100; 1200 \times 100; 1200 \div 10.$
22.  $12345 \div 1000; 5678 \div 100 \div 10; 1 \times 100 \times 100.$
23. These expressed as ares are 12.64, 4.68, 1000 · then add.

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24. Expressed in dekares those are 10 and .1.
25.  $7.5645 \text{ Ha} \times 27 = 204.2415 \text{ Ha}.$
26. The length and breadth in decametres are 40 and 27;  
 $\therefore$  area =  $40 \times 27$  sq. decametres = 1080 ares = &c.
27.  $18.49 \text{ Ha} = 1849 \text{ ares} = 1849 \text{ sq. decametres. } \therefore \text{ one side is } 43 \text{ Dm} = 430 \text{ m. } \therefore \text{ perimeter} = 1720 \text{ m.}$
28.  $100 \text{ dm} = 1 \text{ Dm}; \therefore 10000 \text{ sq. dm} = 1 \text{ sq. Dm} = 1 \text{ are} = 1000 \text{ ma. } \therefore 1 \text{ sq. dm} = .1 \text{ ma.}$
29. Since the cube is a 3-metre cube the area of each face is 9 sq. m.  $\therefore$  whole surface is 54 sq. m = .54 sq. Dm = .54 ares = 54 ca.
30.  $1 \text{ a } 5 \text{ da} = 1.5 \text{ a} = 1.5 \text{ sq. Dm} = 1.5 \times 10 \times 10 \text{ sq. m} = 1.5 \times 10 \times 10 \times 100 \times 100 \text{ sq. cm.}$
31. If the dimensions are 2, 3, 4, linear units, the volume is 24 cubic units.  $\therefore 8 \text{ cubic units} = 1 \text{ cubic m. } \therefore \text{ linear unit} = \text{a half metre. } \therefore \text{whole surface} = 52 \text{ sq. half m.} = 13 \text{ sq. m} = .13 \text{ sq. Dm} = .13 \text{ a} = 13 \text{ ca.}$
32. If the block is a metre thick it will cover 4.5 sq. m.  $\therefore$  if cut into 100 sections it will cover 450 sq. m = 4.5 Dm = 4.5 a.
33. The surface measures 20 ha = 2000 a = 2000 sq. Dm =