

What is the product of 27×28 ?

Divide 1170 by 9.

Find the 4th proportional to $25 : 40 : : 60$.

6. What is the square root of 62,500 ? Explain the process of ascertaining the answer.

7. On examining the slide rule generally in use by excise officers in Canada, the following gauge points are to be discerned :

On the Line A—

1. Against the figures 1. 128

2 “ “ 2. 15

On the Line D—

3. At 17.15

4. At 46.37

5. At 52.32

On the Line B—

6. Against 2.31

Explain for what purposes these are to be used, and how they are obtained.

8. How would you proceed to find the contents in Winchester bushels of a malt floor of the following dimensions : Length, 400 inches ; breadth, 250 inches ; depth, 3.5 inches.

— — — —
No. 6.
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MALT GAUGING.

Time—2 Hours.

(Maximum number of marks attainables, 100.)

1. Name the several gauges referred to in the Inland Revenue Law, and state which of them you consider to be most essential in order to protect the revenue against fraud ?

2. How should the first gauge compare with each subsequent one ?

3. Of what capacity is the unit of measure substituted by the Inland Revenue Department in the place of the Winchester bushel, and now in use by Excise Officers ?

4. In a floor of malt the following measurements are taken, viz :

The sides are 11, 12, 13 and 17 feet respectively ; the first two forming a right angle. Six dips are taken as follows :—7 in., 6.2, 5.7, 5.2, 6.3, 6.1.— How many M. cubic inches do these measurements represent ?