

Coimisiún na Scrúduithe Stáit
State Examinations Commission
Cor na Madadh, Baile Átha Luain, Co. na hIarmhí
Cornamaddy, Athlone, Co. Westmeath.

S. 92/09

To: Management Authorities of Second-Level Schools

Re: *Formulae and Tables* booklet

Dear Principal,

I refer to the State Examinations Commission Circulars No. S.56/09 and S.60/09 regarding the new *Formulae and Tables* booklet. As previously notified, this new booklet will be used in the **2010 examinations and thereafter**, and the older *Mathematics Tables* booklet will no longer be provided.

Since publication of the booklet, some misprints have been brought to our attention. Furthermore, representations have been received regarding other minor amendments. Accordingly, the second print run of this booklet will be amended to address these matters. The details are set out in the appendix attached.

Please note that in the examinations of 2010 and thereafter, it is the amended version that will be made available to candidates. Candidates are also reminded that they are not allowed to bring their own copies of the booklet into the examination.

As the amendments are minor in nature, we do **not** recommend that those who have already purchased this booklet should replace it. However, students and teachers may wish to record the amendments attached on their existing copies. A copy of this circular and appendix is also available on the State Examinations Commission website www.examinations.ie

School management authorities are asked to bring this information to the attention of the representatives of parents and teachers on the board of management, or other appropriate representatives of parents and teachers, for transmission to individual parents and teachers.

If you have any queries in relation to this circular, please call (090) 644 2765.

Tom Carney,
Assistant Principal
December, 2009

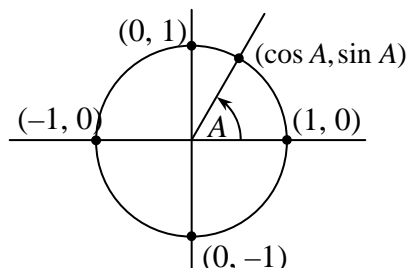
Appendix: Amendments to first print run of *Formulae and Tables* booklet.

Amendment

On page 13, the point **at the top** of the unit circle has been incorrectly labelled as (1, 0).

This should read (0, 1).

The amended diagram is as shown here.



Amendment & insertion

On page 64, the value of “standard temperature” is given as 273.16 K.

This should read 273.15 K.

A new entry will be inserted immediately below the entry for standard temperature, stating that the triple point of water is 273.16 K.

The corrected entry and the new entry will read:

teocht chaighdeánach	273.15 K	standard temperature
tríphointe an uisce	273.16 K	triple point of water

Insertion

The formula for the angles between two lines will be added to the *Co-ordinate Geometry* section on pages 18 and 19. This insertion will involve adjusting the layout of the remaining formulae on these two pages. The additional entry will read:

uillinneacha idir dhá líne dar fánaí m_1 agus m_2	$\tan \theta = \pm \frac{m_1 - m_2}{1 + m_1 m_2}$	angles between two lines of slopes m_1 and m_2
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Amendment

On page 18, the formula for the point dividing $[PQ]$ in the ratio $a : b$ will be amended so that the denominators of the fractions read “ $b + a$ ” rather than “ $a + b$ ”. Whereas the original version is correct, this amended version makes it easier for a reader to adapt the formula to the case of external division. The amended entry will read:

pointe a roinneann $[PQ]$ sa chóimheas $a : b$	$\left(\frac{bx_1 + ax_2}{b + a}, \frac{by_1 + ay_2}{b + a} \right)$	point dividing $[PQ]$ in the ratio $a : b$
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