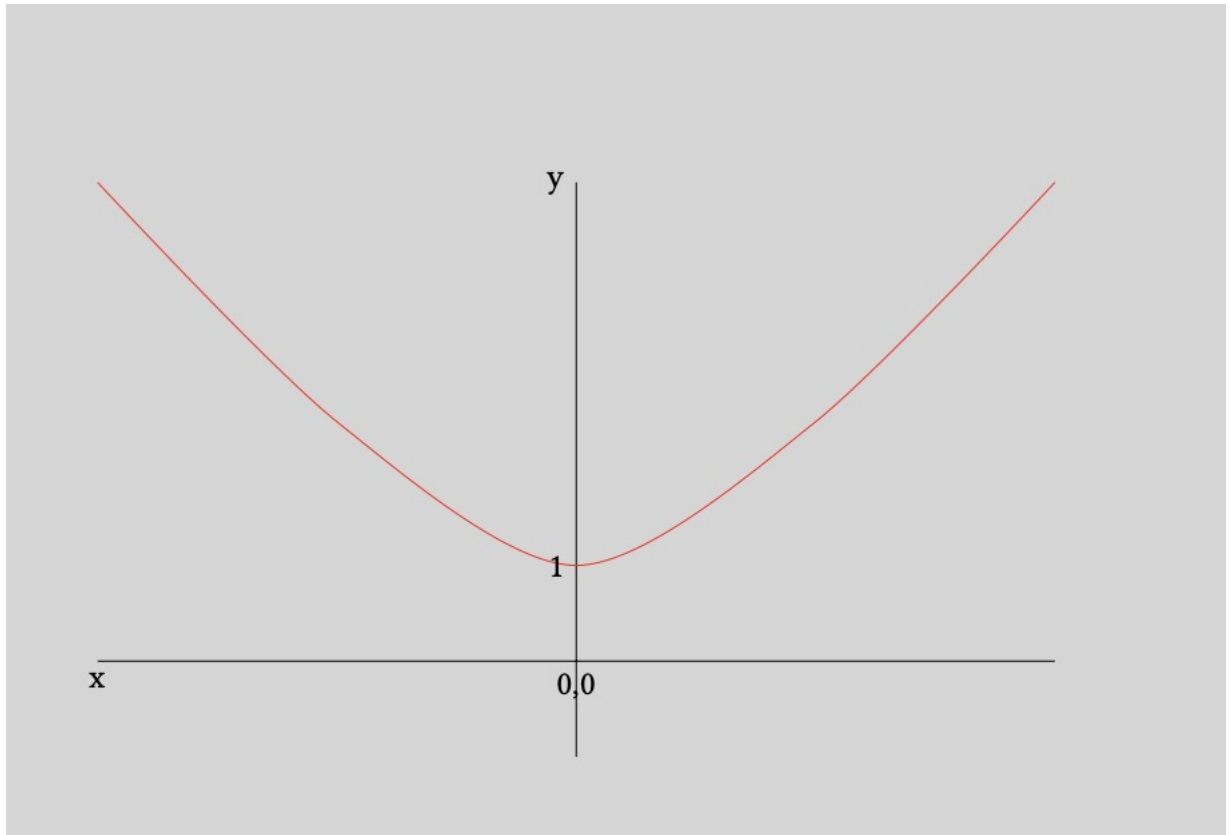


Question 1:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Question 2:

$$xy \times xz = x^2yz$$

Question 3:

Question 4:

The screenshot shows the MST124 website interface. The 'All weeks' tab is selected, and the 'EXPAND ALL' button is visible. The main content area displays a 'Welcome' message and a list of tasks for Unit 1: Algebra, which is scheduled for 5-18 October. The tasks are as follows:

Task	Status
Read the MST124 Guide, familiarise yourself with this website and watch the introductory video, 'Welcome to MST124'.	Completed (Green checkmark)
MST124 Guide PDF 1.1 MB	Completed (Green checkmark)
MST124 Guide errata (page 20 and page 23): Please note that TMA 01 now only covers Unit 1. TMA 02 now covers Units 2, 3, 4, 5, 6.	Completed (Green checkmark)
Welcome to MST124	Completed (Green checkmark)
Work through the Introduction and Section 1 of the <i>Computer algebra guide</i> . It introduces you to Maxima, which you need to install to study MST124. Further information is available from the 'Computer resources' page.	Completed (Green checkmark)
Maxima website	Completed (Green checkmark)

Below the tasks, there is a note about Mac users experiencing difficulties with Maxima on the latest Mac OS (Sonoma), causing wxmaxima to crash on some computers. It provides instructions for installing Maxima and a link to the 'Computer Resources' page. It also mentions that if you need further advice, you should ask in the Maxima forum. A final apology is given for any inconvenience caused by this unforeseen outcome of the Mac OS (Sonoma) operating system update.

The right sidebar contains a 'Tutor' section with a link to 'Contact your Tutor' (Munira Patel), a 'News' section with a link to 'Welcome Tutorial - Weds 2nd Oct' (Posted: 2 Oct), a 'Reminder' section, a 'Mathematics news' section with a link to 'Careers and Opportunities' (Posted: 8 Oct), and a 'Recent activity' section with links to 'Book A' and 'General'.

Question 5: Solve the equation:

$$\frac{x}{5} - (1 + x) = \frac{2}{3}$$

Eliminate fractions by multiplying by the LCM, 15.

$$15 \left[\frac{x}{5} - (1 + x) \right] = 15 \cdot \frac{2}{3}$$

Distribute the 15.

$$\frac{15x}{5} - 15(1 + x) = \frac{30}{3}$$

Simplify.

$$3x - 15 - 15x = 10$$

Combine like terms.

$$-12x - 15 = 10$$

Add 15 to both sides to isolate x .

$$-12x = 25$$

Divide by -12 to solve for x .

$$x = \frac{-25}{12}$$