

1st July

Higher Plus 5-a-day

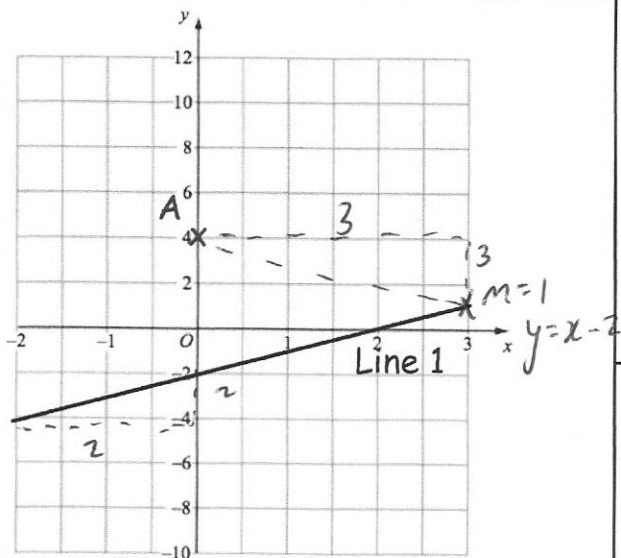


Corbettmaths

Arrange the following in order, smallest first

$25^{-\frac{1}{2}}$ $\left(\frac{2}{3}\right)^{-2}$ 0.1
 $\frac{1}{5}$ $\left(\frac{3}{2}\right)^2 = \frac{9}{4}$ $\frac{1}{9}$

0.1 , $25^{-\frac{1}{2}}$, $\left(\frac{2}{3}\right)^{-2}$



Write down the equation of the line perpendicular to Line 1 and passing through A.

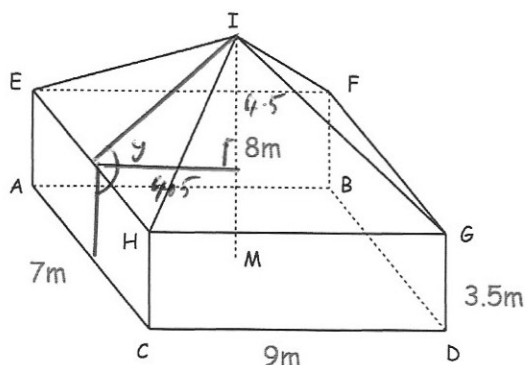
$y = -x + 4$

Find the shortest distance between Line 1 and A.

$y^2 = 3^2 + 3^2$
 $y^2 = 18$
 $y = \sqrt{18} = 3\sqrt{2}$

$-x + 4 = x - 2$
 $2x = 6$
 $x = 3$ $(3, 1)$

The diagram shows a cuboid and a pyramid.
The apex I is directly above the centre M, of ABDC.



Calculate the angle between EHI and ACHE

$\tan y = \frac{4.5}{4.5}$

$y = 45^\circ$

$90 + 45 = 135^\circ$