15.

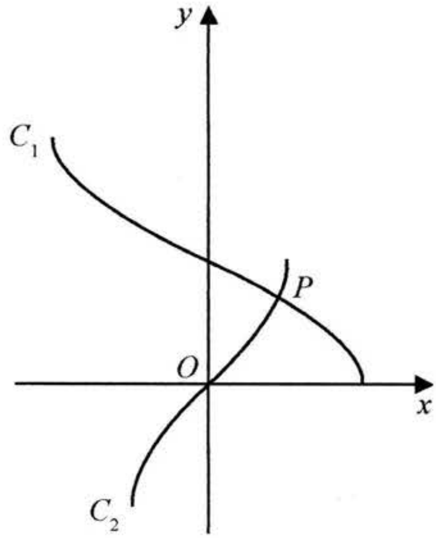

Figure 2

Figure 2 shows a sketch of

- the curve C_1 with equation $y = \arccos \frac{1}{2}x$
- the curve C_2 with equation $y = \arcsin x$

The curves meet at the point P as shown in Figure 2.

(a) Show that at P

$$\tan y = 2$$

(2)

(b) Hence, or otherwise, find the exact x coordinate of P

(2)