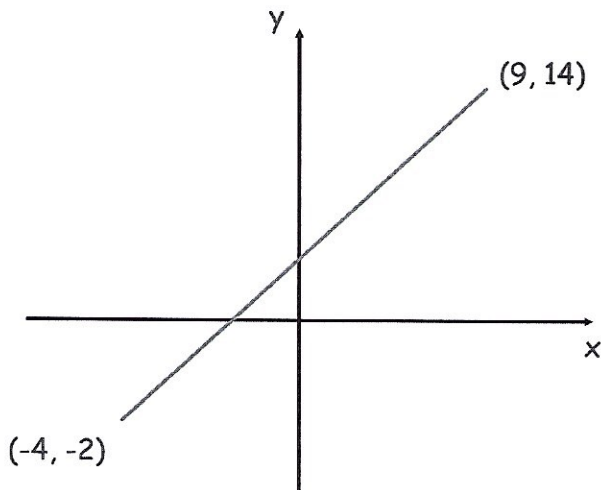


2nd April



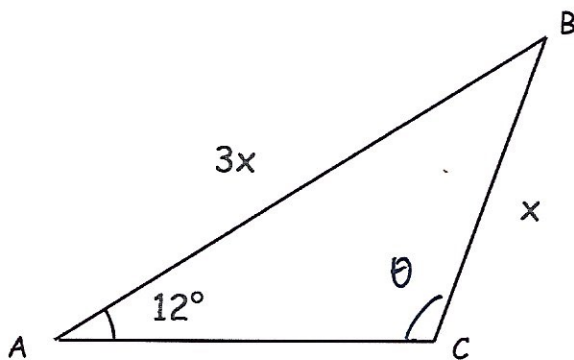
Corbettmaths

Shown below is the graph of $y = f(x)$ Write down the domain of $f(x)$

$$-4 \leq x \leq 9$$

Write down the range of $f(x)$

$$-2 \leq f(x) \leq 14$$

 $\angle ACB$ is an obtuse angle.Find the size of angle $\angle ACB$

$$\frac{\sin \theta}{3x} = \frac{\sin 12}{x}$$

$$\sin \theta = 3 \sin 12$$

$$\sin \theta = 0.6237 \dots$$

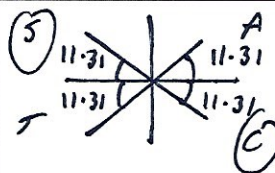
$$\theta = 38.589 \dots$$

$$\text{or } \boxed{141.41^\circ}$$

Solve $-\cos x = 5 \sin x$ for $0^\circ \leq x \leq 360^\circ$

$$-\frac{1}{5} = \tan x$$

$$\tan^{-1}\left(\frac{1}{5}\right) = 11.31^\circ$$



$$\text{or } x = 168.69^\circ$$

$$\text{or } 348.69^\circ$$