

2nd October



Corbettm0ths

Given

$$f(x) = 5x - 3$$

$$g(x) = 2x + 1$$

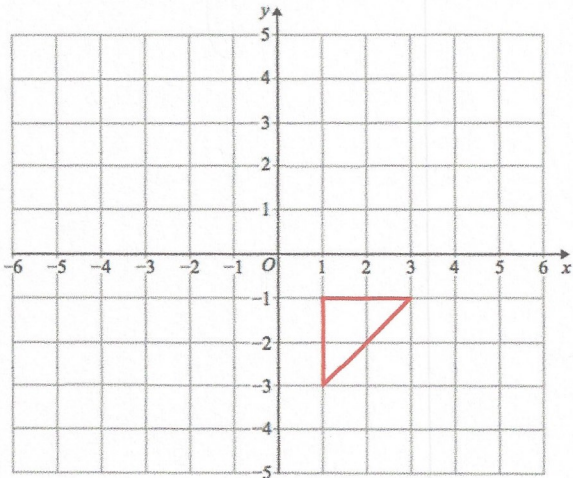
$$5(2x+1) - 3$$

$$10x + 5 - 3$$

Find

$$fg(x)$$

$$10x + 2$$



Shown is a triangle with points (1, -1), (3, -1) and (1, -3)

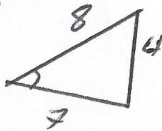
Describe a transformation such that one ^{vertex} point is invariant.

Rotation of 180° about (1, -1)

Describe a transformation such that two ^{vertices} points are invariant.

Reflection using $x=1$ as the mirror line

Find the smallest angle in a triangle whose sides have lengths 4cm, 7cm and 8cm.



$$\begin{aligned} \cos A &= \frac{8^2 + 7^2 - 4^2}{2 \times 8 \times 7} \\ &= 29.99^\circ \end{aligned}$$

$\xi = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16\}$

A = prime numbers (2, 3, 5, 7, 11, 13)

B = factors of 28 (1, 2, 4, 7, 14)

(a) Complete the Venn diagram

One of the numbers is selected at random.

(b) Write down $P(B|A)$ $\frac{2}{6} = \frac{1}{3}$

