$\qquad$

| 15th May |  |
| :---: | :---: |
| $2 a(3 x+7)+4(a x-2) \equiv 130 x+b$ <br> Work out a and b | Corbettm $\alpha$ ths |
| $f(x)=\frac{x}{3 x+1}$ for positive values of $x$. Work out $f(x+2)-f(x)$ <br> Give your answer as a simplified fraction. |  |
|  | Angle BAC is obtuse. <br> Work out the size of angle BAC. |
| $y=x^{5}-\frac{1}{x^{4}}$ <br> Work out $\frac{d^{2} y}{d x^{2}}$ |  |

