$22 \quad A B C$ and $A C D$ are triangles.
$k$ is a constant.


22 (a) Show that $\overrightarrow{C D}=6 \mathbf{a}+4.5 \mathbf{b}$
[1 mark]
$\qquad$
$\qquad$
$\qquad$

22 (b) $B C D$ is a straight line.
Work out the value of $k$.
You must show your working.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer $\qquad$

