

Therefore, $(-10+2k) = 0$ and $(10-a-8k+k^2) = 0$

For $(-10+2k) = 0$,

$$2k = 10$$

And thus, $k = 5$

For $(10-a-8k+k^2) = 0$

$$10 - a - 8 \times 5 + 25 = 0$$

$$10 - a - 40 + 25 = 0$$

$$-5 - a = 0$$

Therefore, $a = -5$

Hence, $k = 5$ and $a = -5$