3.

Solution

To find the q-intercept, we set f equal to 0, so :

$f(q) = q^2 - 6q + 8 = (-4 + q)(-2 + q) = 0$

$-2 + q = 0$ or $-4 + q = 0$

$q = 2$ or $q = 4$

So, the q-intercepts are at the points $(2,0)$ and $(4,0)$