



b. Find the value of a .

Solutions

1.

$(1 + ax)^{10} = 1 + 10ax + \frac{10 \times 9}{2}(ax)^2 + \frac{10 \times 9 \times 8}{6}(ax)^3$	M1 M1
$= 1 + 10ax + 45(ax)^2 + 120(ax)^3$	M1 M1

2.

$120a^3 = 2 \times 45a^2$	M1
$a = \frac{3}{4}$	M1

