a) Reproducir tabla

$$e^x = 1 + x + \frac{x^2}{2!} + \frac{x^3}{3!} + \cdots$$

x	$E(X)$	e^x
1	2.718282	2.718282
5	148.4132	148.4132
10	22026.47	22026.46
15	3269017.	3269017.
20	4.8516531×10^{8}	4.8516520×10^{8}
−1	.3678794	.3678795
−5	6.7377836×10^{-3}	6.7379470×10^{-3}
−10	$-1.6408609 \times 10^{-4}$	4.5399930×10^{-5}
−15	$-2.2377001 \times 10^{-2}$	3.0590232×10^{-7}
−20	1.202966	2.0611537×10^{-9}

b) Resolver

$$0.780x + 0.563y = 0.217$$
$$0.457x + 0.330y = 0.127$$

$$f'(x) \simeq \frac{f(x+h) - f(x)}{h} \equiv \Delta_h f(x)$$

c) Reproducir tabla

h	$\Delta_h f(1)$	e	error
10^{0}	4.67077446	2.71828183	1.95×10^{0}
10^{-1}	2.85884380	2.71828183	1.41×10^{-1}
10^{-2}	2.73191929	2.71828183	1.36×10^{-2}
10^{-3}	2.71987939	2.71828183	1.60×10^{-3}
10^{-4}	2.72035623	2.71828183	2.07×10^{-3}
10^{-5}	2.71797204	2.71828183	3.10×10^{-4}
10^{-6}	2.62260461	2.71828183	9.57×10^{-2}
10^{-7}	4.76837206	2.71828183	2.05×10^{0}
10^{-8}	0.00000000	2.71828183	2.72×10^{0}

d) Resolver

Solve the quadratic equation a=1, b=3000.001, c=3.