Discrete time systems and z-transform

Solutions Module 4 - No steps

• 1.a:
$$x[n] = 4\delta[n] + 3\delta[n+1] - 5\delta[n-1] - 2\delta[n-2]$$

• 1.b:
$$x[n] = -3(-\frac{1}{4})^n u[n] + 4(-\frac{1}{2})^n u[n]$$

• 1.c:
$$x[n] = (-\frac{1}{2})^n u[n]$$

• 1.d:
$$x[n] = -(\frac{1}{a})^{n+1}u[n] + (\frac{1}{a})^{n-1}u[n-1]$$

• 1.e:
$$x[n] = -\frac{4^n}{n}u[-n-1]$$

• 1.f:
$$x[n] = 5\delta[n] - 2^n u[-n-1] - 3(\frac{1}{2})^n u[n]$$