~~Advanced topics in Algebra~~

~~LIST 1~~

Programming and Classification

LIST 2

I ① 4^k

② 3^k

③ 3^{k-3}

⑤

a) $P(X>5) = (\frac{1}{2})^6 = \frac{1}{64}$

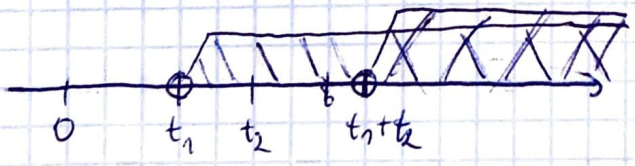
b) $P(X \text{ is even}) = \frac{1}{2}$

c) $E(X) = 1$

because we get tail statistical in 1 of 2 toss

d) $P(X > t_1 + t_2 \mid X > t_1) = P(X \geq t_2)$

$$\frac{P[(X>t_1+t_2) \cap (X \geq t_1)]}{P(X>t_1)} = \frac{P(X>t_1+t_2)}{P(X>t_1)}$$



II

① $TF_{classy,1} = \frac{1}{18}$

$TF_{it,2} = 0$

$IDF_{are} = \log_2\left(\frac{3}{2}\right) \approx 0,58$

② $TF.IDF(are, 1) = \frac{1}{18} \cdot \log_2\left(\frac{3}{2}\right)$

$TF.IDF(are, 2) = \frac{1}{27} \log_2\left(\frac{3}{2}\right)$

$TF.IDE(do, 3) = 0$

③ If there ~~is an~~ 't "are" in 1st text or there ~~or~~ is "are" in every texts.