6. Gyakorlat
Transzformált várható értéke, variancia, szórás - Eredmények

1. $\dfrac{19}{6}$

2. a) $\mathbb{P}(Y = 1) = \dfrac{5}{9}$, $\mathbb{P}(Y = -1) = \dfrac{4}{9}$ b) $\dfrac{1}{9}$ c) $\dfrac{1}{9}$

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3. $\mathbb{D}^2(X) = \dfrac{24}{25}$, $\mathbb{D}^2(Y) = \dfrac{21}{25}$

   $f_{X+Y}(-2) = \dfrac{1}{10}$, $f_{X+Y}(0) = \dfrac{1}{2}$, $f_{X+Y}(2) = \dfrac{2}{5}$, $\mathbb{D}^2(X + Y) = \dfrac{41}{25}$

4. $\mathbb{E}(XY) = 0$, $\mathbb{D}^2(5X - 6Y + 8) = 97$,

5. $X =$ dobott számok összege, $\mathbb{E}(X) = 9$, $\mathbb{D}(X) = \sqrt{\dfrac{21}{2}} \approx 3{,}2404$

6. $\mathbb{E}\left((3 - X)^2\right) = 6$, $\mathbb{D}(5 - 2X) = 2\sqrt{6} \approx 4{,}8990$, $\mathbb{E}\left((X + 1)(X - 2)\right) = 10$

7. $\mathbb{E}((2 + X)^2) = 5$, $\mathbb{D}^2(4 + 3X) = 36$