3.[.1] Determinant, second column.

3.[.1]  $3 + -0 \times (-6) + 3(-6) - 5(-3)$ 3. 3 + -3 = -3

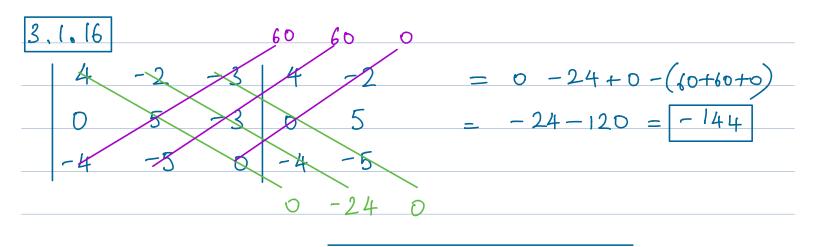
Det, Second column  $\begin{vmatrix} \frac{1}{2} & -4 & \frac{1}{3} \\ \frac{1}{2} & \frac{1}{3} & = -(-4)(-7) + 1(-7) - 4(0) \\ \frac{1}{2} & \frac{1}{3} & = -28 - 7 = -35 \\ \frac{1}{1} & \frac{1}{4} & \frac{1}{-2} \end{vmatrix}$ 

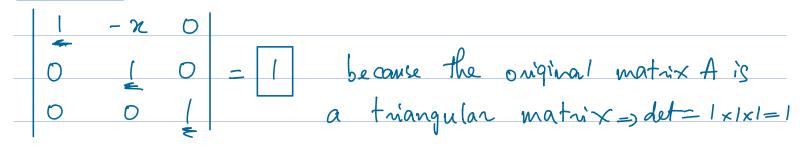
3.1.5 Det, first now
$$3 \quad 7 \quad -3 \quad = \quad 3 \quad (-30) \quad -7 \quad (-9) \quad + \quad (-3) \quad (25)$$

$$5 \quad 0 \quad 6 \quad = \quad -90 \quad +63 \quad -75 \quad = \quad -90 \quad -12$$

$$4 \quad 5 \quad 3 \quad = \quad \boxed{-102}$$

= -98 - 10 = -108





$$\begin{vmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{vmatrix} = +1 \begin{vmatrix} 1 & 0 \\ 1 & 0 \end{vmatrix} = (1)(-1) = -1$$