Quiz 2 - sol's

1) \[
\begin{pmatrix}
1 & 0 & 2 & 0 \\
0 & 1 & 4 & 1 \\
0 & -1 & -4 & 2
\end{pmatrix}
\] → \[
\begin{pmatrix}
1 & 0 & 2 & 0 \\
0 & 1 & 4 & 1 \\
0 & 0 & 0 & 13
\end{pmatrix}
\] √

2) \[
\begin{array}{c}
3 & 0 & 1 & 1 & 0 & 0 \\
0 & 2 & 1 & 0 & 1 & 0 \\
0 & 1 & 0 & 0 & 0 & 1
\end{array}
\] → \[
\begin{array}{c}
3 & 0 & 1 & 1 & 0 & 0 \\
0 & 1 & 0 & 0 & 1 & 1 \\
0 & 0 & 1 & -2 & 0 & 1
\end{array}
\]

100 \[\frac{1}{3} \quad \frac{2}{3} \]
010 001
001 01-2

5) \[
\begin{array}{c}
2 & 0 & 0 & 0 \\
0 & 3 & 1 & 0 \\
0 & 0 & 1 & -1
\end{array}
\] → \[
\begin{array}{c}
2 & 0 & 0 & 0 \\
0 & 3 & 1 & x \\
0 & 0 & 3 & 2
\end{array}
\] \[\text{det} = 6\]

b) \[
\begin{array}{c}
2 & 3 & 0 & 2 \\
0 & 3 & 2 & 0 \\
0 & 0 & 3 & 2
\end{array}
\]

[diagram]

\[\text{det} = 9\]