```
In [117]:  # 각 성분을 자연로그, 상용로그, 밑이 2인 로그를 씌운 값을 계산하기
           np.log(arr1)

/Users/doorbw/anaconda3/envs/tensorflow/lib/python3.6/site-packages/ipykernel/__main__.py:2:
RuntimeWarning: invalid value encountered in log
  from ipykernel import kernelapp as app

Out[117]:  array([[       nan,        nan, -1.00055807],
                  [-0.08656889, -0.79045064, -4.98596986],
                  [-0.66959092, -0.94122672,        nan],
                  [-0.28048605,        nan, -0.17691415],
                  [-1.00484914,  0.20708197, -0.65847301]])
```

```
In [118]:  np.log10(arr1)

/Users/doorbw/anaconda3/envs/tensorflow/lib/python3.6/site-packages/ipykernel/__main__.py:1:
RuntimeWarning: invalid value encountered in log10
  if __name__ == '__main__':

Out[118]:  array([[       nan,        nan, -0.43453685],
                  [-0.03759639, -0.34328835, -2.1653792 ],
                  [-0.29079964, -0.40876957,        nan],
                  [-0.12181354,        nan, -0.07683284],
                  [-0.43640043,  0.08993456, -0.28597119]])
```

```
In [119]:  np.log2(arr1)

/Users/doorbw/anaconda3/envs/tensorflow/lib/python3.6/site-packages/ipykernel/__main__.py:1:
RuntimeWarning: invalid value encountered in log2
  if __name__ == '__main__':

Out[119]:  array([[       nan,        nan, -1.44350016],
                  [-0.1248925 , -1.14037921, -7.193234  ],
                  [-0.9660155 , -1.35790312,        nan],
                  [-0.40465583,        nan, -0.25523316],
                  [-1.44969086,  0.29875613, -0.94997574]])
```