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]])
```