

# Video Compression Homework #1 - Color Transform Report

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## Method

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$$Y = 0.299 * R + 0.587 * G + 0.114 * B$$

$$U = -0.169 R - 0.331 G + 0.5 B + 128$$

$$V = 0.5 R - 0.419 G - 0.081 B + 128$$

$$C_b = -0.168736 R - 0.331264 G + 0.5 B + 128$$

$$C_r = 0.5 R - 0.418688 G - 0.081312 B + 128$$

## Result

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R



G



B



Y



U



V



Cb



