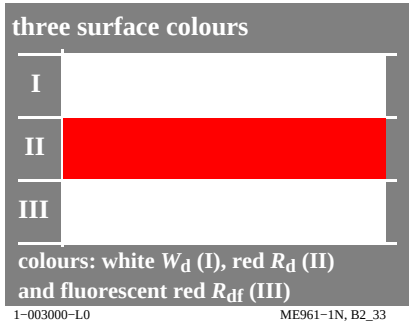
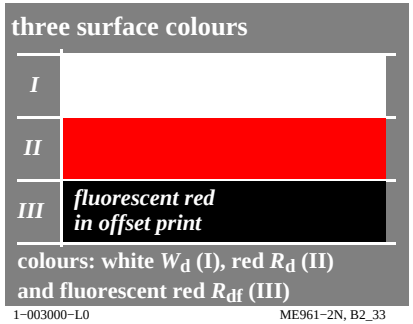
percieved color terms (colorness: cube root coordinates)

percieved color terms	name and relationship with standard chromaticity values	notes:
lightness	$L^* = 116\,(Y/100)^{1/3} - 16$	*definition 1976 in:*
	Aproximation: $L^* = 100\,(Y/100)^{1/3}$	*CIELUV, CIELAB*
chromaticness	*for linear chromatic value diagram (AT, B)*	
red−green	$a^* = 500\,[\,(X/X_n)^{1/3} - (Y/Y_n)^{1/3}\,]$	*definition 1976 in:*
	$= 500\,(a' - a'_n)\,Y^{1/3}$	*CIELAB*
yellow−blue	$b^* = 200\,[\,(Y/Y_n)^{1/3} - (Z/Z_n)^{1/3}\,]$	
	$= 500\,(b' - b'_n)\,Y^{1/3}$	*n=D65 (surround)*
radial	$C^* = [\,a^{*2} + b^{*2}\,]^{1/2}$	
saturation	**= chromaticness / lightness**	*definition*
red−green	$S^*_a = a^* / [\,100\,(Y/100)^{1/3}\,]$	*for:*
	$= 21{,}6\,(a' - a'_n)$	*CIELAB 1976*
yellow−blue	$S^*_b = b^* / [\,100\,(Y/100)^{1/3}\,]$	
	$= 21{,}6\,(b' - b'_n)$	
radial	$S^*_c = C^* / [\,100\,(Y/100)^{1/3}\,]$	
	$= 21{,}6\,[\,(a' - a'_n)^2 + (b' - b'_n)^2\,]^{1/2}$	
chromaticity	*for nonlinear chromaticity diagram (a', b')*	*definition*
red−green	$a' = (1/X_n)^{1/3}\,(x/y)^{1/3}$	*opponent*
yellow−blue	$= 0{,}2191\,(x/y)^{1/3}$ for *D65*	*color system*
radial	$b' = -0{,}4\,(1/Z_n)^{1/3}\,(z/y)^{1/3}$	
	$= -0{,}08376\,(z/y)^{1/3}$ for *D65*	
	$c' = [\,(a' - a'_n)^2 + (b' - b'_n)^2\,]^{1/2}$	

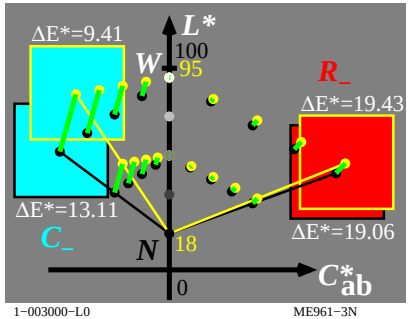
1−003000−L0 ME961−7N, BT9_10



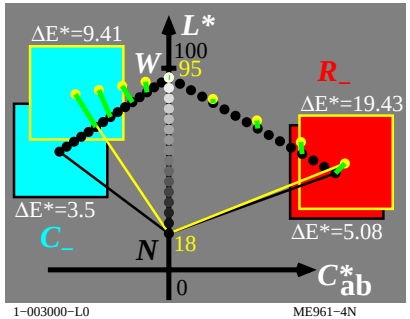
1−003000−L0 ME961−1N, B2_33



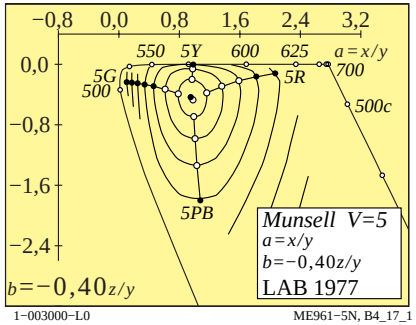
1−003000−L0 ME961−2N, B2_33



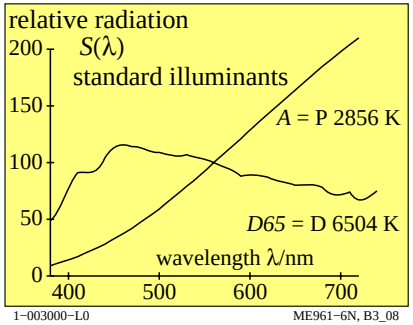
1−003000−L0 ME961−3N



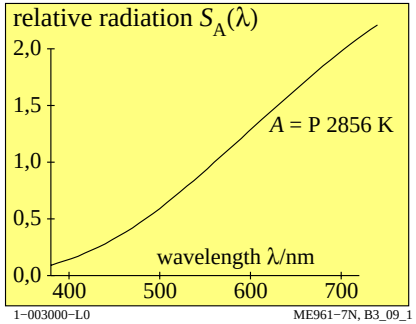
1−003000−L0 ME961−4N



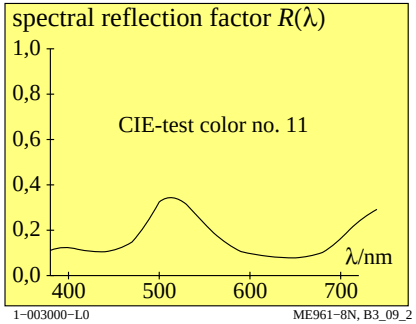
1−003000−L0 ME961−5N, B4_17_1



1−003000−L0 ME961−6N, B3_08



1−003000−L0 ME961−7N, B3_09_1

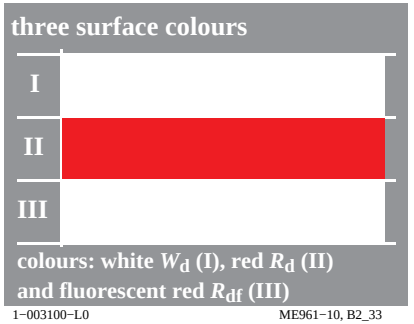


1−003000−L0 ME961−8N, B3_09_2

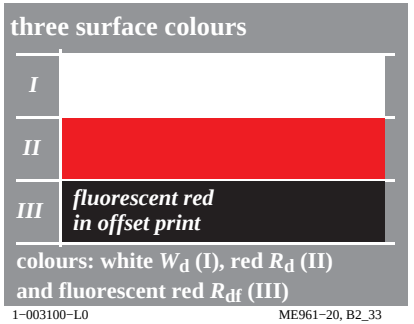
percieved color terms (colorness: cube root coordinates)

percieved color terms	name and relationship with standard chromaticity values	notes:
lightness	$L^* = 116\,(Y/100)^{1/3} - 16$	*definition 1976 in:*
	Aproximation: $L^* = 100\,(Y/100)^{1/3}$	*CIELUV, CIELAB*
chromaticness	*for linear chromatic value diagram (AT, B)*	
red−green	$a^* = 500\,[\,(X/X_n)^{1/3} - (Y/Y_n)^{1/3}\,]$	*definition 1976 in:*
	$= 500\,(a' - a'_n)\,Y^{1/3}$	*CIELAB*
yellow−blue	$b^* = 200\,[\,(Y/Y_n)^{1/3} - (Z/Z_n)^{1/3}\,]$	
	$= 500\,(b' - b'_n)\,Y^{1/3}$	*n=D65 (surround)*
radial	$C^* = [\,a^{*2} + b^{*2}\,]^{1/2}$	
saturation	**= chromaticness / lightness**	*definition*
red−green	$S^*_a = a^* / [\,100\,(Y/100)^{1/3}\,]$	*for:*
	$= 21{,}6\,(a' - a'_n)$	*CIELAB 1976*
yellow−blue	$S^*_b = b^* / [\,100\,(Y/100)^{1/3}\,]$	
	$= 21{,}6\,(b' - b'_n)$	
radial	$S^*_c = C^* / [\,100\,(Y/100)^{1/3}\,]$	
	$= 21{,}6\,[\,(a' - a'_n)^2 + (b' - b'_n)^2\,]^{1/2}$	
chromaticity	*for nonlinear chromaticity diagram (a', b')*	*definition*
red−green	$a' = (1/X_n)^{1/3}\,(x/y)^{1/3}$	*opponent*
yellow−blue	$= 0{,}2191\,(x/y)^{1/3}$ for *D65*	*color system*
radial	$b' = -0{,}4\,(1/Z_n)^{1/3}\,(z/y)^{1/3}$	
	$= -0{,}08376\,(z/y)^{1/3}$ for *D65*	
	$c' = [\,(a' - a'_n)^2 + (b' - b'_n)^2\,]^{1/2}$	

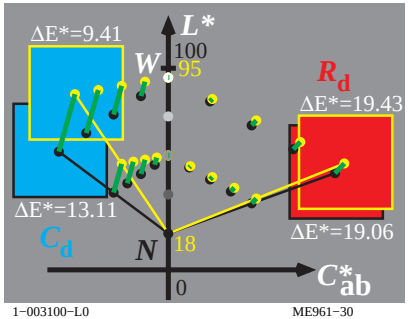
1−003100−L0 ME961−70, BT9_10



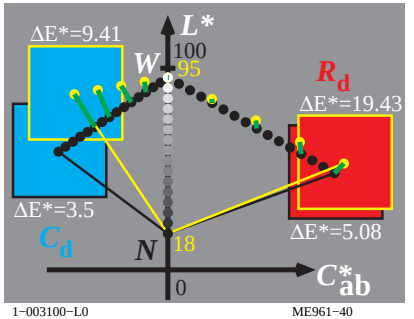
1−003100−L0 ME961−10, B2_33



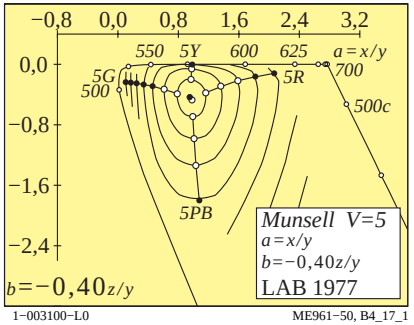
1−003100−L0 ME961−20, B2_33



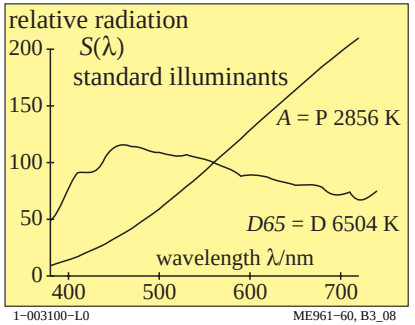
1−003100−L0 ME961−30



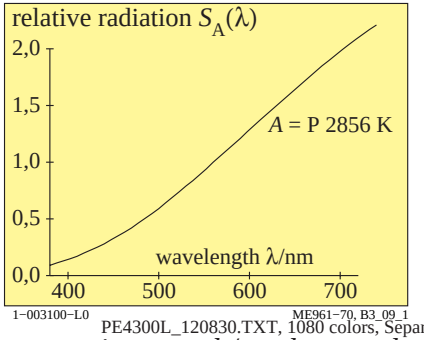
1−003100−L0 ME961−40



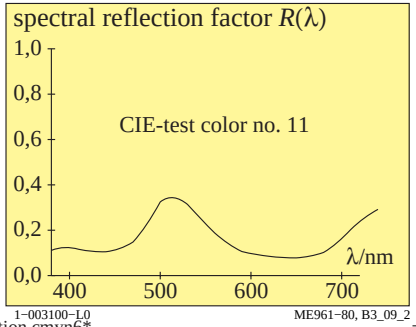
1−003100−L0 ME961−50, B4_17_1



1−003100−L0 ME961−60, B3_08



1−003100−L0 ME961−70, B3_09_1



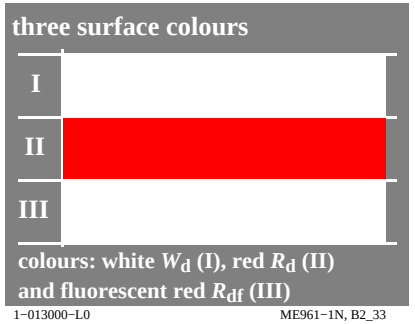
1−003100−L0 ME961−80, B3_09_2

PE4300L_120830.TXT, 1080 colors, Separation cmyn6*
input: *rgb/cmyk −> rgb*$_d$
output: transfer to *rgb*$_d$

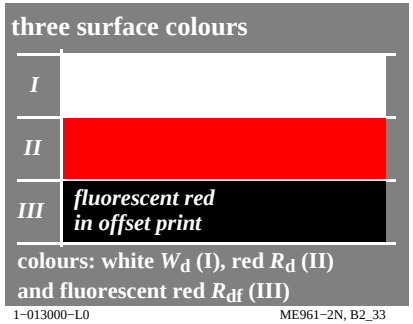
percieved color terms (colorness: cube root coordinates)

percieved color terms	name and relationship with standard chromaticity values	notes:
lightness	$L^* = 116\,(Y/100)^{1/3} - 16$	*definition 1976 in:*
	Aproximation: $L^* = 100\,(Y/100)^{1/3}$	*CIELUV, CIELAB*
chromaticness	*for linear chromatic value diagram (AT, B)*	
red−green	$a^* = 500\,[\,(X/X_n)^{1/3} - (Y/Y_n)^{1/3}\,]$	*definition 1976 in:*
	$= 500\,(a' - a'_n)\,Y^{1/3}$	*CIELAB*
yellow−blue	$b^* = 200\,[\,(Y/Y_n)^{1/3} - (Z/Z_n)^{1/3}\,]$	
	$= 500\,(b' - b'_n)\,Y^{1/3}$	*n=D65 (surround)*
radial	$C^* = [\,a^{*2} + b^{*2}\,]^{1/2}$	
saturation	**= chromaticness / lightness**	*definition*
red−green	$S^*_a = a^* / [\,100\,(Y/100)^{1/3}\,]$	*for:*
	$= 21{,}6\,(a' - a'_n)$	*CIELAB 1976*
yellow−blue	$S^*_b = b^* / [\,100\,(Y/100)^{1/3}\,]$	
	$= 21{,}6\,(b' - b'_n)$	
radial	$S^*_c = C^* / [\,100\,(Y/100)^{1/3}\,]$	
	$= 21{,}6\,[\,(a' - a'_n)^2 + (b' - b'_n)^2\,]^{1/2}$	
chromaticity	*for nonlinear chromaticity diagram (a', b')*	*definition*
red−green	$a' = (1/X_n)^{1/3}\,(x/y)^{1/3}$	*opponent*
yellow−blue	$= 0{,}2191\,(x/y)^{1/3}$ for *D65*	*color system*
radial	$b' = -0{,}4\,(1/Z_n)^{1/3}\,(z/y)^{1/3}$	
	$= -0{,}08376\,(z/y)^{1/3}$ for *D65*	
	$c' = [\,(a' - a'_n)^2 + (b' - b'_n)^2\,]^{1/2}$	

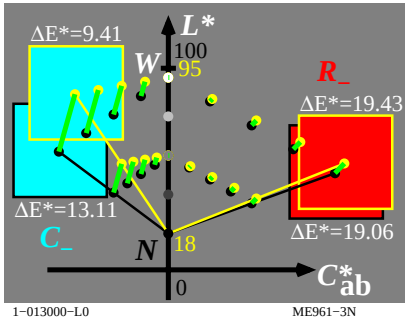
1−013000−L0 ME961−7N, BT9_10



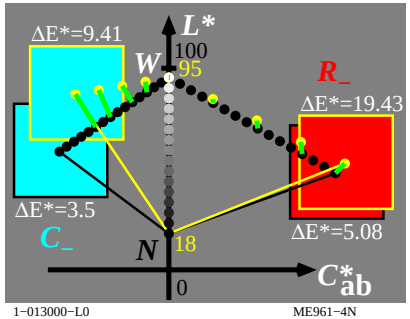
1−013000−L0 ME961−1N, B2_33



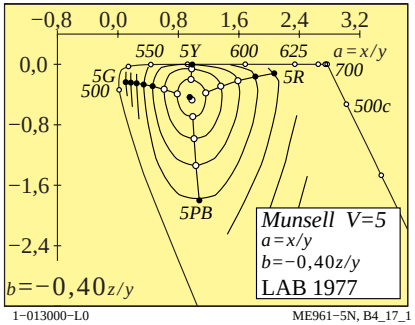
1−013000−L0 ME961−2N, B2_33



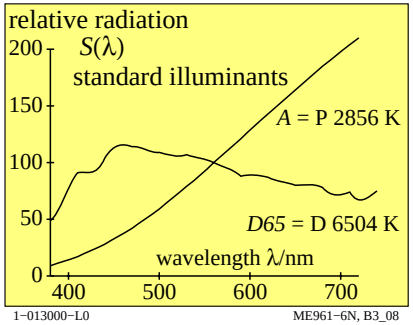
1−013000−L0 ME961−3N



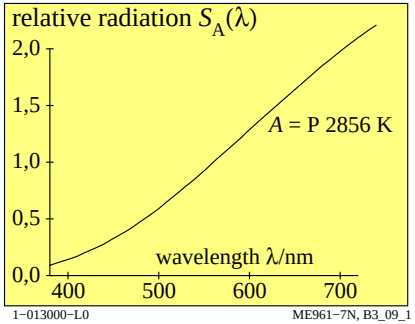
1−013000−L0 ME961−4N



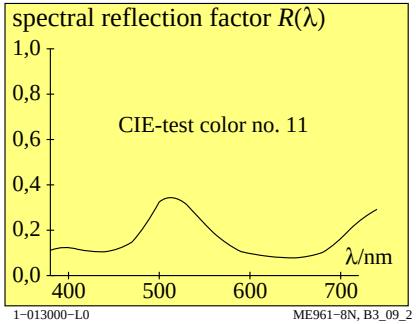
1−013000−L0 ME961−5N, B4_17_1



1−013000−L0 ME961−6N, B3_08



1−013000−L0 ME961−7N, B3_09_1

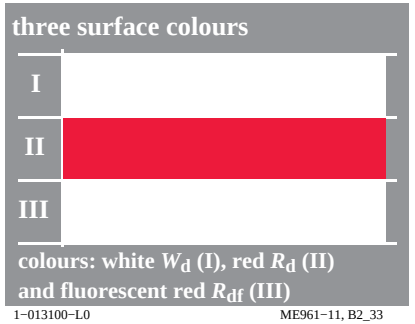


1−013000−L0 ME961−8N, B3_09_2

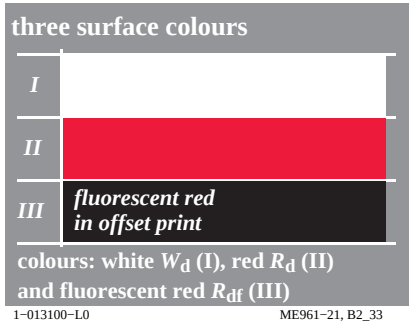
percieved color terms (colorness: cube root coordinates)

percieved color terms	name and relationship with standard chromaticity values	notes:
lightness	$L^* = 116\,(Y/100)^{1/3} - 16$	*definition 1976 in:*
	Aproximation: $L^* = 100\,(Y/100)^{1/3}$	*CIELUV, CIELAB*
chromaticness	*for linear chromatic value diagram (AT, B)*	
red−green	$a^* = 500\,[\,(X/X_n)^{1/3} - (Y/Y_n)^{1/3}\,]$	*definition 1976 in:*
	$= 500\,(a' - a'_n)\,Y^{1/3}$	*CIELAB*
yellow−blue	$b^* = 200\,[\,(Y/Y_n)^{1/3} - (Z/Z_n)^{1/3}\,]$	
	$= 500\,(b' - b'_n)\,Y^{1/3}$	*n=D65 (surround)*
radial	$C^* = [\,a^{*2} + b^{*2}\,]^{1/2}$	
saturation	**= chromaticness / lightness**	*definition*
red−green	$S^*_a = a^* / [\,100\,(Y/100)^{1/3}\,]$	*for:*
	$= 21{,}6\,(a' - a'_n)$	*CIELAB 1976*
yellow−blue	$S^*_b = b^* / [\,100\,(Y/100)^{1/3}\,]$	
	$= 21{,}6\,(b' - b'_n)$	
radial	$S^*_c = C^* / [\,100\,(Y/100)^{1/3}\,]$	
	$= 21{,}6\,[\,(a' - a'_n)^2 + (b' - b'_n)^2\,]^{1/2}$	
chromaticity	*for nonlinear chromaticity diagram (a', b')*	*definition*
red−green	$a' = (1/X_n)^{1/3}\,(x/y)^{1/3}$	*opponent*
yellow−blue	$= 0{,}2191\,(x/y)^{1/3}$ for *D65*	*color system*
radial	$b' = -0{,}4\,(1/Z_n)^{1/3}\,(z/y)^{1/3}$	
	$= -0{,}08376\,(z/y)^{1/3}$ for *D65*	
	$c' = [\,(a' - a'_n)^2 + (b' - b'_n)^2\,]^{1/2}$	

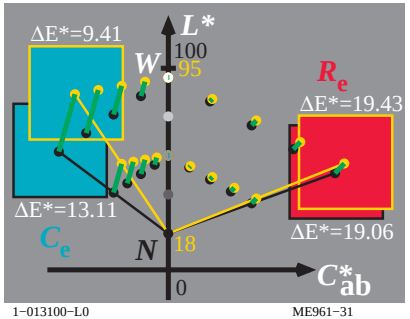
1−013100−L0 ME961−71, BT9_10



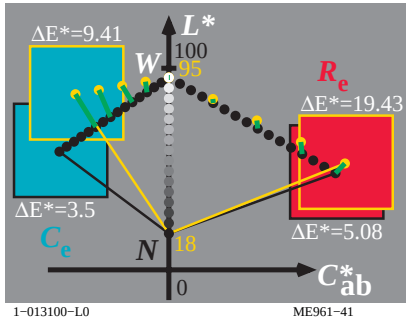
1−013100−L0 ME961−11, B2_33



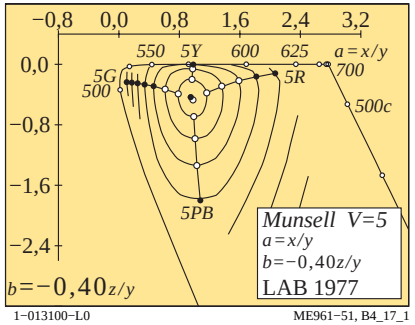
1−013100−L0 ME961−21, B2_33



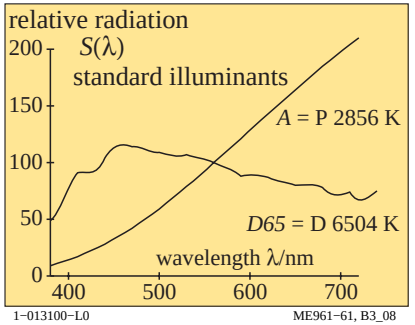
1−013100−L0 ME961−31



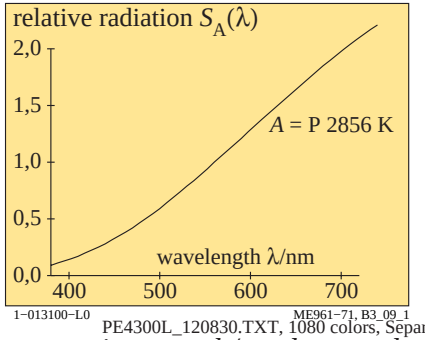
1−013100−L0 ME961−41



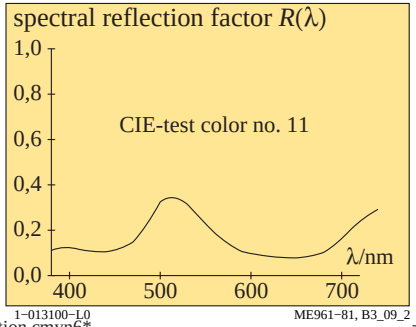
1−013100−L0 ME961−51, B4_17_1



1−013100−L0 ME961−61, B3_08



1−013100−L0 ME961−71, B3_09_1



1−013100−L0 ME961−81, B3_09_2

PE4300L_120830.TXT, 1080 colors, Separation cmyn6*
input: *rgb/cmyk −> rgb*$_e$
output: transfer to *rgb*$_e$