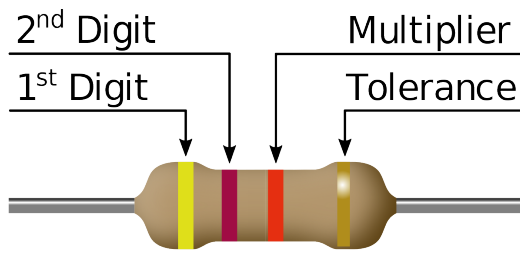


# RESISTOR COLOR CODES



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COLOR	VALUE	MULTIPLIER	TOLE-RANCE
BLACK	0	x 1	
BROWN	1	x 10	± 1%
RED	2	x 100	± 2%
ORANGE	3	x 1000	
YELLOW	4	x 10 000	
GREEN	5	x 100 000	
BLUE	6	x 1000 000	
VIOLET	7		
GREY	8		
WHITE	9		
GOLD		x 0.1	± 5%

- Calculate the missing colors and resistors in the following tables..
- In the last column, calculate the current that will flow through the resistor when connected to a 9 volt battery.
- All values should be written to 3 decimal places and with the multiplier symbol that best corresponds to it (M=Mega, k=kilo, m=mili, μ=micro)

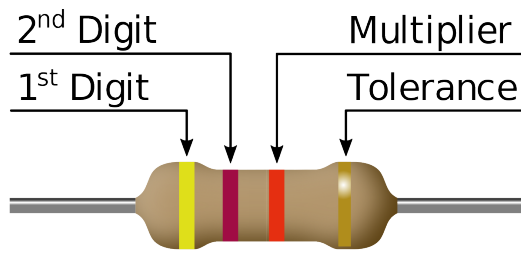
## COMMERCIAL SERIES E6: (5%)

### COMMERCIAL SERIES E6: (5%)

VALUE Ω	1st DIGIT	2nd DIGIT	MULTI- PLIER	TOLE- RANCE	I = 9v / R
4.7 MΩ					
	RED	RED	BLACK	GOLD	
15 Ω					
	ORANG E	ORANG E	GOLD	GOLD	
10 kΩ					
	BROWN	GREEN	BROWN	GOLD	
220 Ω					
	YELLOW	VIOLET	BLACK	GOLD	
3.3 kΩ					
	RED	RED	RED	GOLD	
100 Ω					
	BLUE	GREY	BROWN	GOLD	
22 kΩ					
	BROWN	BLACK	YELLOW	GOLD	
1.0 Ω					
	BLUE	GREY	ORANG E	GOLD	
680 kΩ					
	ORANG E	ORANG E	GREEN	GOLD	

VALUE Ω	1st DIGIT	2nd DIGIT	MULTI- PLIER	TOLE- RANCE	I = 9v / R
1.5 kΩ					
	YELLOW	VIOLET	RED	GOLD	
2.2 Ω					
	BROWN	BLACK	BLACK	GOLD	
2.2 MΩ					
	BROWN	GREEN	ORANG E	GOLD	
330 kΩ					
	RED	RED	YELLOW	GOLD	
4.7 Ω					
	BLUE	GREY	GREEN	GOLD	
470Ω					
	BROWN	BLACK	RED	GOLD	
47 kΩ					
	BROWN	GREEN	GOLD	GOLD	
33 Ω					
	BROWN	GREEN	GREEN	GOLD	
150 kΩ					
	BLUE	GREY	GOLD	GOLD	
68 Ω					
	ORANG E	ORANG E	BROWN	GOLD	
1 MΩ					
	ORANG E	ORANG E	ORANG E	GOLD	
6.8 kΩ					
	YELLOW	VIOLET	YELLOW	GOLD	

# RESISTOR COLOR CODES



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COLOR	VALUE	MULTIPLIER	TOLE-RANCE
BLACK	0	x 1	
BROWN	1	x 10	± 1%
RED	2	x 100	± 2%
ORANGE	3	x 1000	
YELLOW	4	x 10 000	
GREEN	5	x 100 000	
BLUE	6	x 1000 000	
VIOLET	7		
GREY	8		
WHITE	9		
GOLD		x 0.1	± 5%

- Calculate the missing colors and resistors in the following tables..
- In the last column, calculate the current that will flow through the resistor when connected to a 9 volt battery.
- All values should be written to 3 decimal places and with the multiplier symbol that best corresponds to it (M=Mega, k=kilo, m=mili, μ=micro)

## COMMERCIAL SERIES E6: (5%)

### COMMERCIAL SERIES E6: (5%)

VALUE Ω	1st DIGIT	2nd DIGIT	MULTI- PLIER	TOLE- RANCE	I = 9v / R
4.7 MΩ	YELLOW	VIOLET	GREEN	GOLD	1,91 μA
22 Ω	RED	RED	BLACK	GOLD	409 mA
15 Ω	BROWN	GREEN	BLACK	GOLD	600 mA
3.3 Ω	ORANG E	ORANG E	GOLD	GOLD	2,73 A
10 kΩ	BROWN	BLACK	ORANG E	GOLD	900 μA
150 Ω	BROWN	GREEN	BROWN	GOLD	60,0 mA
220 Ω	RED	RED	BROWN	GOLD	40,9 mA
47 Ω	YELLOW	VIOLET	BLACK	GOLD	192 mA
3.3 kΩ	ORANG E	ORANG E	RED	GOLD	2,73 mA
2.2 kΩ	RED	RED	RED	GOLD	4,09 mA
100 Ω	BROWN	BLACK	BROWN	GOLD	90,0 mA
680 Ω	BLUE	GREY	BROWN	GOLD	13,2 mA
22 kΩ	RED	RED	ORANG E	GOLD	409 μA
100 kΩ	BROWN	BLACK	YELLOW	GOLD	90,0 μA
1.0 Ω	BROWN	BLACK	GOLD	GOLD	9,00 A
68 kΩ	BLUE	GREY	ORANG E	GOLD	132 μA
680 kΩ	BLUE	GREY	YELLOW	GOLD	13,2 μA
3.3 MΩ	ORANG E	ORANG E	GREEN	GOLD	2,73 μA

VALUE Ω	1st DIGIT	2nd DIGIT	MULTI- PLIER	TOLE- RANCE	I = 9v / R
1.5 kΩ	BROWN	GREEN	RED	GOLD	6,00 mA
4.7 kΩ	YELLOW	VIOLET	RED	GOLD	1,91 mA
2.2 Ω	RED	RED	GOLD	GOLD	4,09 A
10 Ω	BROWN	BLACK	BLACK	GOLD	900 mA
2.2 MΩ	RED	RED	GREEN	GOLD	4,09 μA
15 kΩ	BROWN	GREEN	ORANG E	GOLD	600 μA
330 kΩ	ORANG E	ORANG E	YELLOW	GOLD	27,3 μA
220 kΩ	RED	RED	YELLOW	GOLD	40,9 μA
4.7 Ω	YELLOW	VIOLET	GOLD	GOLD	1,91 A
6.8 MΩ	BLUE	GREY	GREEN	GOLD	1,32 μA
470Ω	YELLOW	VIOLET	BROWN	GOLD	19,2 mA
1 kΩ	BROWN	BLACK	RED	GOLD	9,00 mA
47 kΩ	YELLOW	VIOLET	ORANG E	GOLD	192 μA
1.5 Ω	BROWN	GREEN	GOLD	GOLD	6,00 A
33 Ω	ORANG E	ORANG E	BLACK	GOLD	273 mA
1.5 MΩ	BROWN	GREEN	GREEN	GOLD	6,00 μA
150 kΩ	BROWN	GREEN	YELLOW	GOLD	60,0 μA
6.8 Ω	BLUE	GREY	GOLD	GOLD	1,32 A
68 Ω	BLUE	GREY	BLACK	GOLD	132 mA
330 Ω	ORANG E	ORANG E	BROWN	GOLD	27,3 mA
1 MΩ	BROWN	BLACK	GREEN	GOLD	9,00 μA
33 kΩ	ORANG E	ORANG E	ORANG E	GOLD	273 μA
6.8 kΩ	BLUE	GREY	RED	GOLD	1,32 mA
470 kΩ	YELLOW	VIOLET	YELLOW	GOLD	19,2 μA