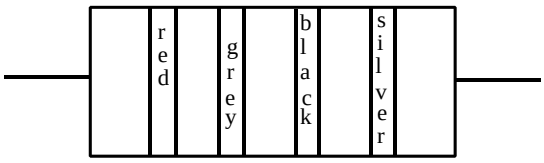
Reading Coloured Resistors

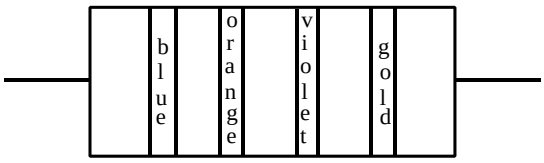
1. Using the international color code below, determine the value of the resistances the two resistors 1 and 2.

Color	Significant Digit	Decimal Multiplier	Tolerance
Black	0	1	-
Brown	1	10	-
Red	2	10^2	-
Orange	3	10^3	-
Yellow	4	10^4	-
Green	5	10^5	-
Blue	6	10^6	-
Violet	7	10^7	-
Grey	8	10^8	-
White	9	10^9	-
Gold	-	0.1	5%
Silver	-	0.01	10%
Transparent	-	-	20%

Resistor 1



Resistor 2

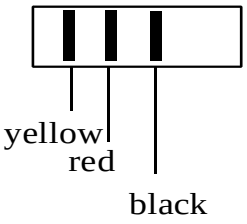


2. The resistance of a resistor can be determined using the three coloured bands on the resistor as well as a colour code.

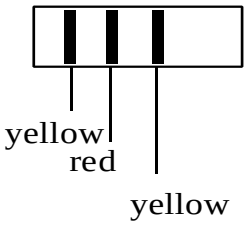
Colour Codes
Black
Brown
Red
Orange
Yellow
Green

Which of the resistors illustrated below has a resistance of 4200 Ω?

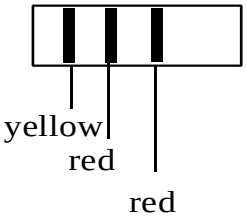
A)



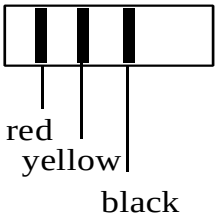
C)



B)



D)



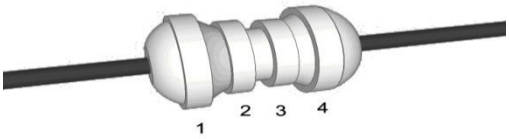
3. The resistance of a resistor can be determined using the four coloured bands on the resistor as well as a colour code. The table below gives some the colour code for resistors.

Band colour	Black	Red	Yellow	Blue	Grey	Silver
Digit	0	2	4	6	8	
Multiplier	1	10^2	10^4	10^6	10^8	
Tolerance	± 20%					± 10%

What would the colours on the resistor be if the resistance of the resistor was 4200 Ω ± 10%?

A) Silver, red , yellow, blue
B) Silver, red, red ,yellow
C) Yellow, red, black, silver
D) Yellow, red, red, silver

4. A diagram of a coded resistor, with each coloured band labelled as a number, is shown below.
Resistor



Resistor Colour Code Chart

Colour	Black	Brown	Red	Orange	Yellow	Green	Blue	Purple	Grey	White
Digit	0	1	2	3	4	5	6	7	8	9
Multiplier	10^0	10^1	10^2	10^3	10^4	10^5	10^6	10^7	10^8	10^9

Tolerance: Gold ± 5%, Silver ± 10%, none ± 20%

The resistance of this resistor is 340 Ω ± 5%.

What is the colour of the third band on the resistor?

A) Black B) Brown C) Orange D) Red