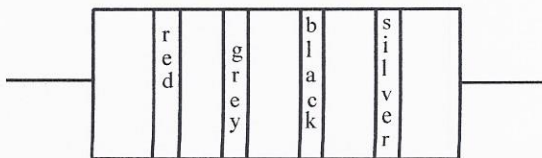


Reading Coloured Resistors

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%

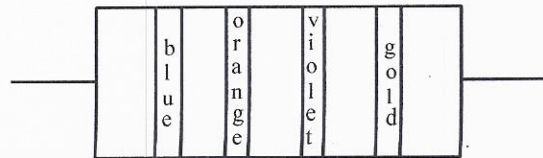
Resistor 1



$$28 \times 10^0 \pm 10\%$$

$$28 \pm 10\%$$

Resistor 2

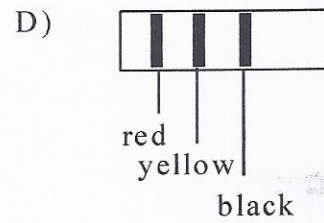
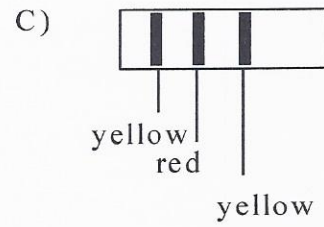
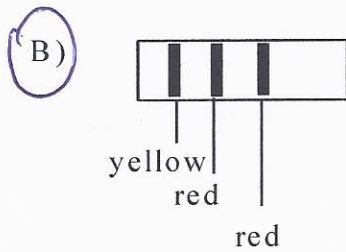
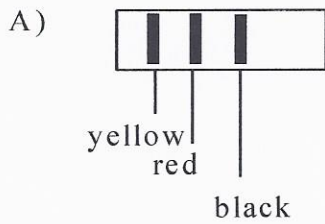


$$63 \times 10^7 \pm 5\%$$

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 4200Ω ?



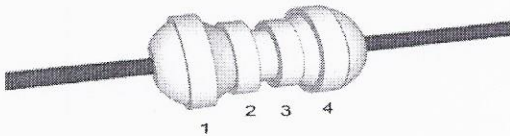
3. The resistance of a resistor can be determined using the four coloured bands on the resistor as well as a colour code. The table below gives some the colour code for resistors.

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	$\pm 20\%$					$\pm 10\%$

What would the colours on the resistor be if the resistance of the resistor was $4200 \Omega \pm 10\%$?

- 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 $\pm 5\%$, Silver $\pm 10\%$, none $\pm 20\%$

The resistance of this resistor is $340 \Omega \pm 5\%$.

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

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