



SEPTEMBER CHALLENGE



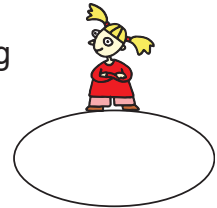
Name _____

1. _____ Patrick is able to determine Sam's secret integer, using the answers to the questions below.

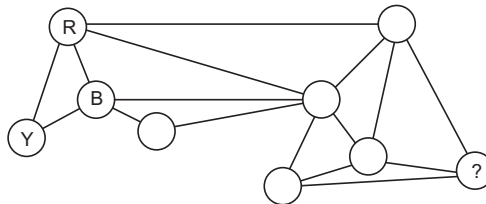
- Is it a factor of 30? Yes
- Is it a prime number? No
- Is it a multiple of 3? No
- Is it less than 3? No

What is Sam's secret integer?

2. _____ students Ten students will stand on a circle. No two students standing next to each other can both have blonde hair. What is the greatest number of students that could have blonde hair?



3. _____ Each circle at a vertex in the diagram below is colored red (R), yellow (Y) or blue (B). No two vertices of a drawn triangle have the same color. One triangle has been completed. What is the color of the vertex marked by the question mark?



4. _____ At what time is the sum of the digits which represent the hours and minutes on a 12-hour digital clock the greatest? For example, the time 7:17 has a sum of $7 + 1 + 7 = 15$.



5. _____ two-point game pieces Marcia has 65 game pieces with a total value of 89 points. Each game piece is worth one or two points. How many two-point game pieces does she have?

