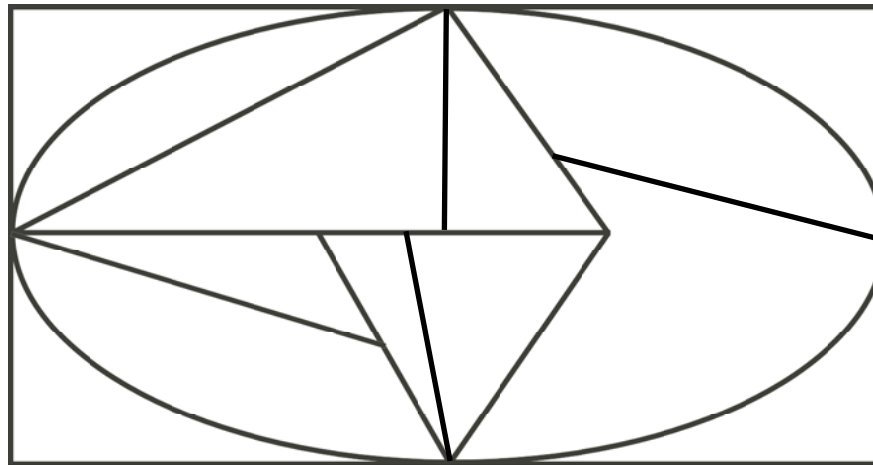


Homework Problems

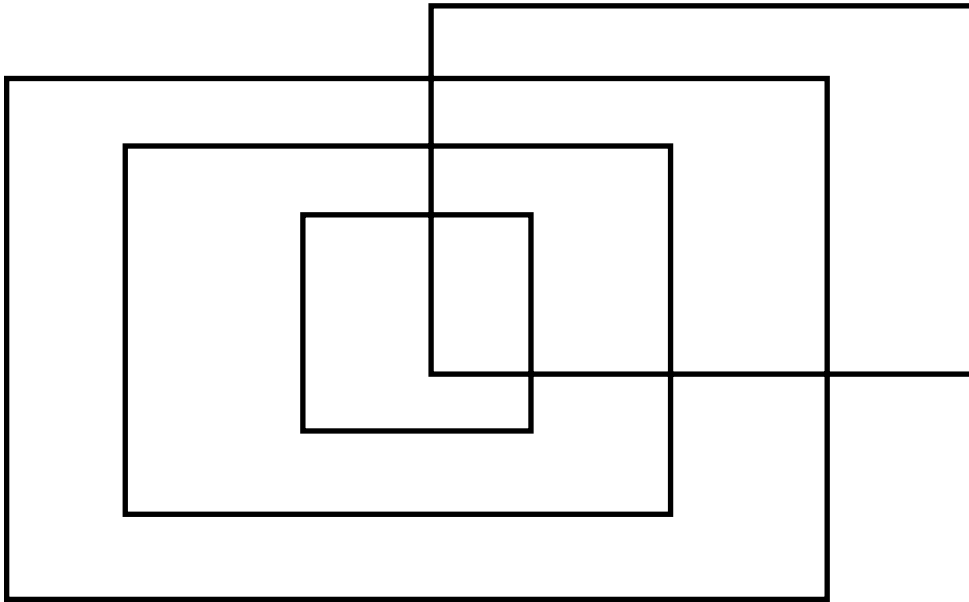
1. Find a vertex – circle it.
2. How many edges come out of the vertex you circled? _____
3. Is the vertex odd or even? _____
4. What is the fewest number of colors that you could use so that no two sections that touch are the same color? _____
5. Did you need to color all the sections before you could answer question 4? _____

Problem 1



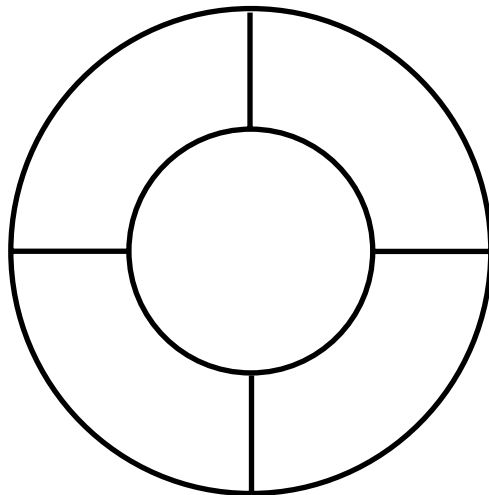
Name _____

Problem 2



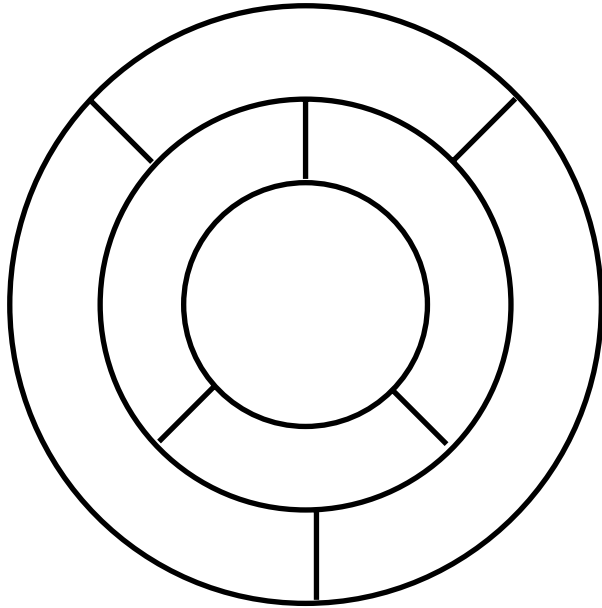
1. Circle a Vertex
2. How many edges come from the vertex? _____
3. Is the vertex odd or even? _____
4. How many colors are needed so that that no two sections that touch are the same color? _____
5. Did you need to color all the sections to answer question 4? _____

Problem 3



1. Circle a Vertex
2. How many edges come from the vertex? _____
3. Is the vertex odd or even? _____
4. How many colors are needed so that that no two sections that touch are the same color? _____
5. Did you need to color all the sections to answer question 4? _____

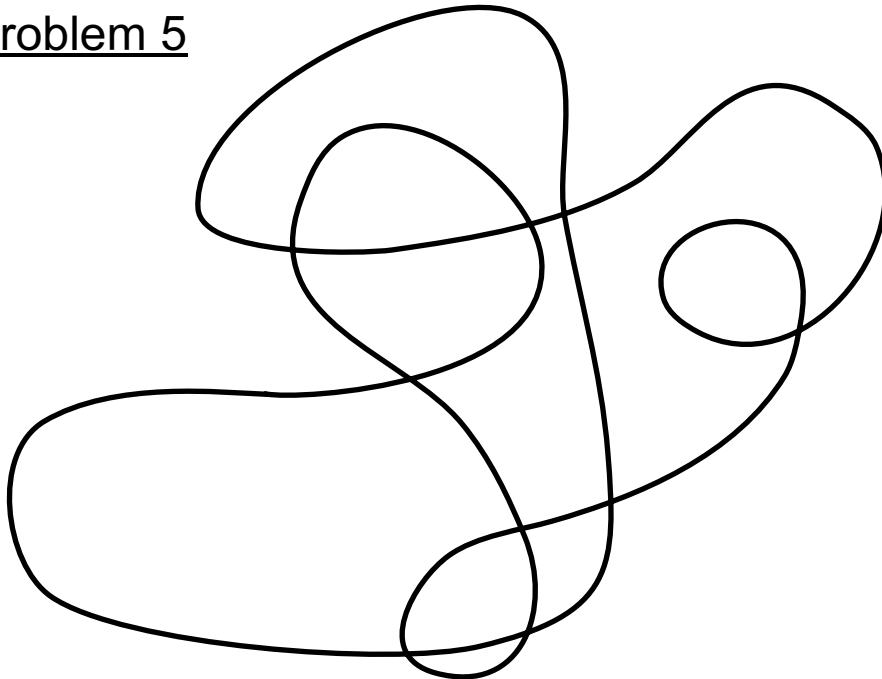
Problem 4



Name _____

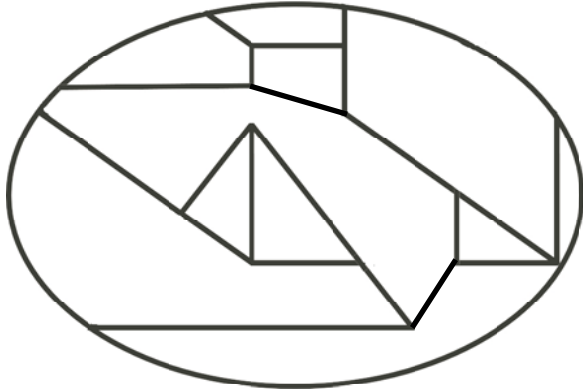
1. Circle a Vertex
2. How many edges come from the vertex? _____
3. Is the vertex odd or even? _____
4. How many colors are needed so that that no two sections that touch are the same color? _____
5. Did you need to color all the sections to answer question 4? _____

Problem 5



1. Circle a Vertex
2. How many edges come from the vertex? _____
3. Is the vertex odd or even? _____
4. How many colors are needed so that that no two sections that touch are the same color? _____
5. Did you need to color all the sections to answer question 4? _____

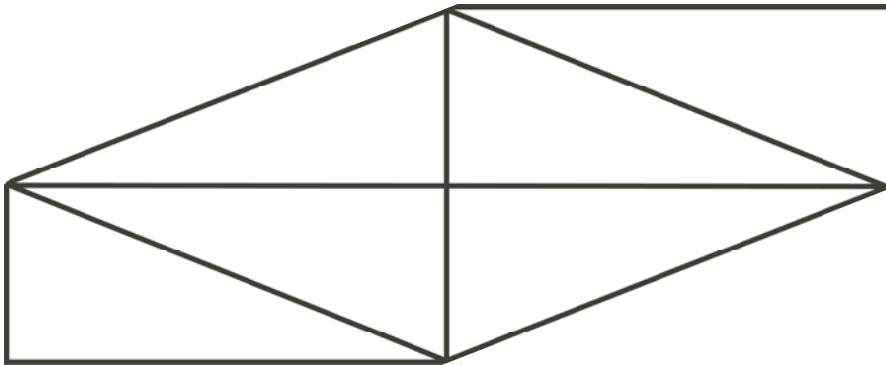
Problem 6



Name _____

1. Circle a Vertex
2. How many edges come from the vertex? _____
3. Is the vertex odd or even? _____
4. How many colors are needed so that that no two sections that touch are the same color? _____
5. Did you need to color all the sections to answer question 4? _____

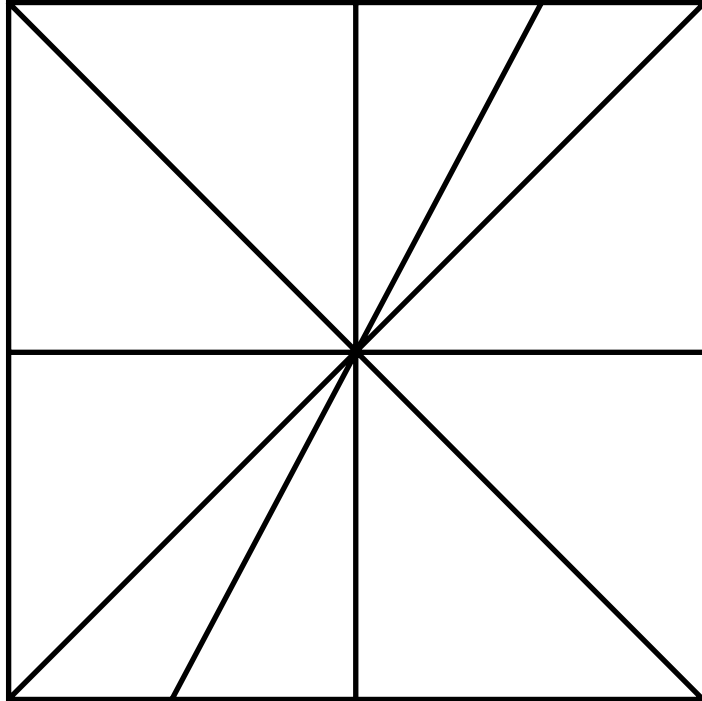
Problem 7



1. Circle a Vertex
2. How many edges come from the vertex? _____
3. Is the vertex odd or even? _____
4. How many colors are needed so that that no two sections that touch are the same color? _____
5. Did you need to color all the sections to answer question 4? _____

Problem 10

Name _____

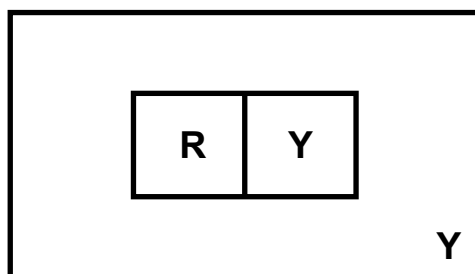
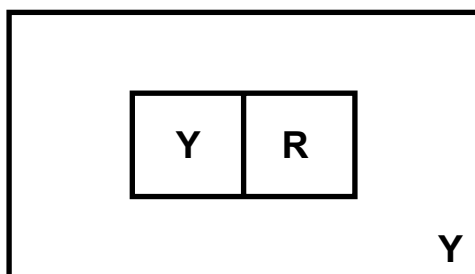
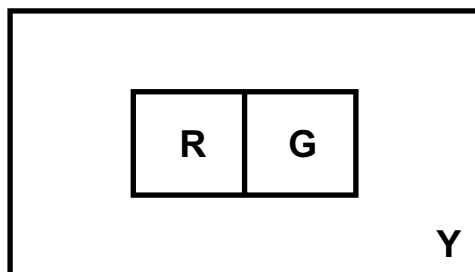
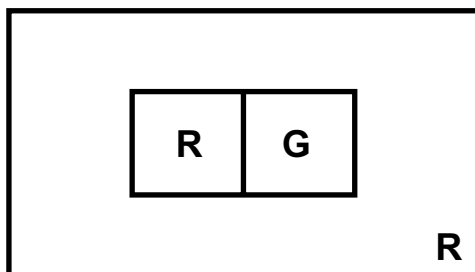


1. Circle a Vertex
2. How many edges come from the vertex? _____
3. Is the vertex odd or even? _____
4. How many colors are needed so that that no two sections that touch are the same color? _____
5. Did you need to color all the sections to answer question 4? _____

Problem 11

Becky wants to color a design using the smallest number of colors but no two touching edges can be the same color. Which of these could be her design?

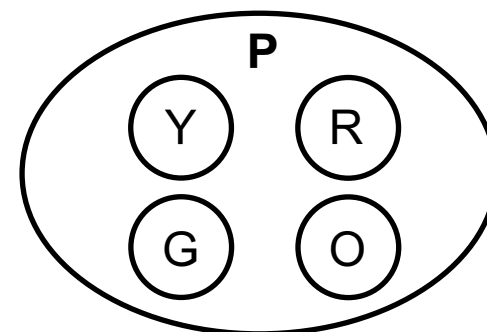
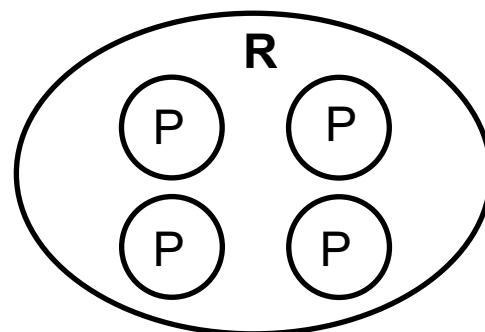
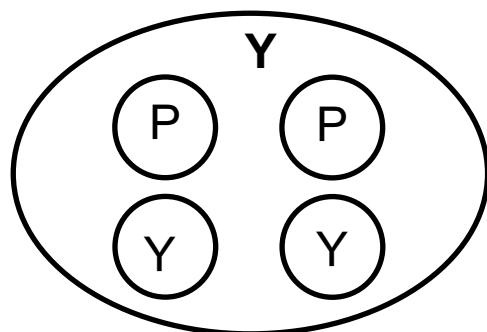
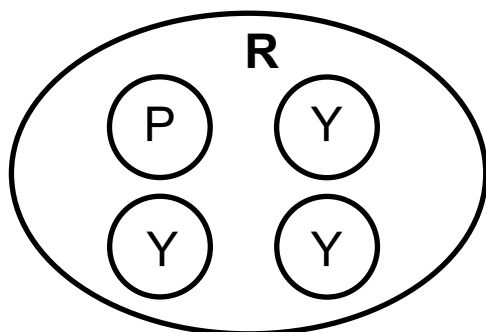
R = Red
Y = Yellow
G = Green



Problem 12

David wants to color a design using the smallest number of colors but no two touching edges can be the same color. Which of these could be his design?

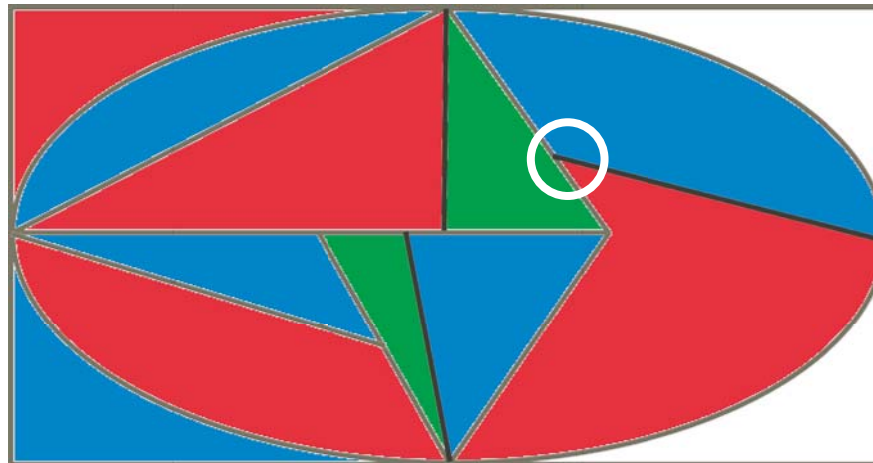
R = Red
Y = Yellow
G = Green
P = Purple
O = Orange



Homework Problems

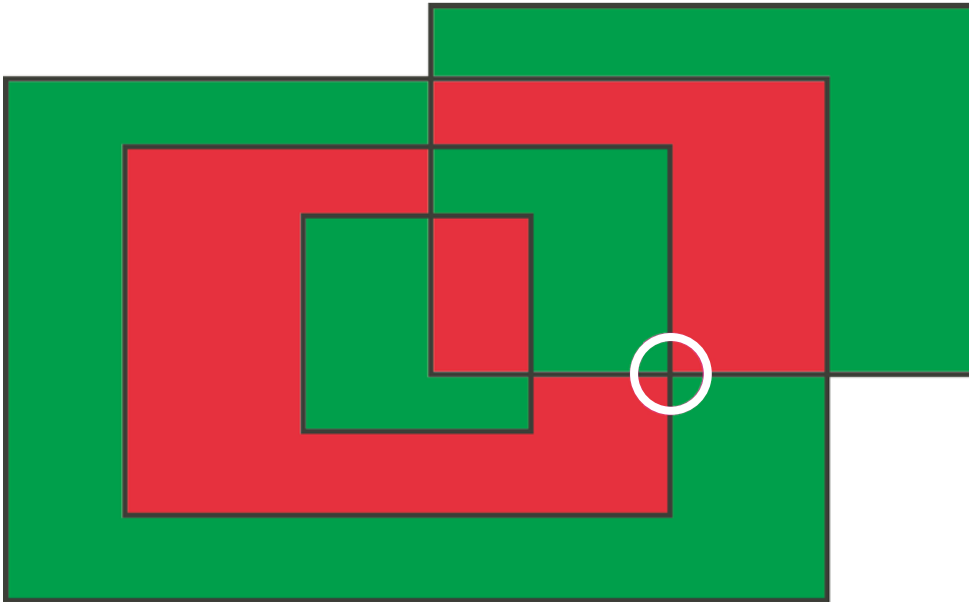
1. Find a vertex – circle it.
2. How many edges come out of the vertex you circled? 3
3. Is the vertex odd or even? Odd
4. What is the fewest number of colors that you could use so that no two sections that touch are the same color? 3
5. Did you need to color all the sections before you could answer question 4? Yes

Problem 1



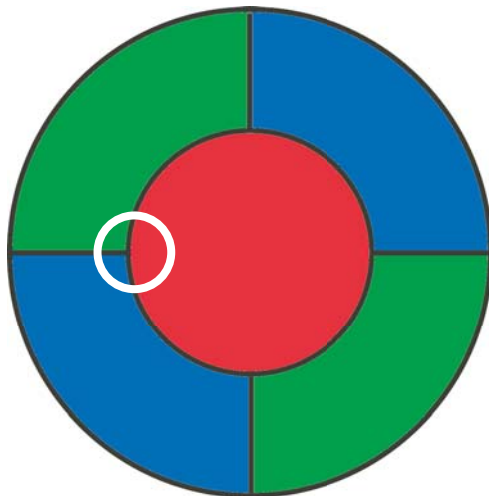
Name _____

Problem 2



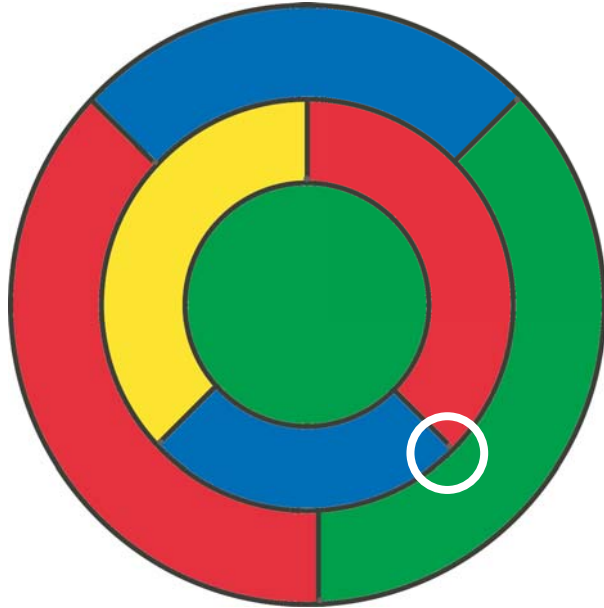
1. Circle a Vertex
2. How many edges come from the vertex? 4
3. Is the vertex odd or even? Even
4. How many colors are needed so that that no two sections that touch are the same color? 2
5. Did you need to color all the sections to answer question 4? No

Problem 3



1. Circle a Vertex
2. How many edges come from the vertex? 3
3. Is the vertex odd or even? Odd
4. How many colors are needed so that that no two sections that touch are the same color? 3 or 4
5. Did you need to color all the sections to answer question 4? Yes

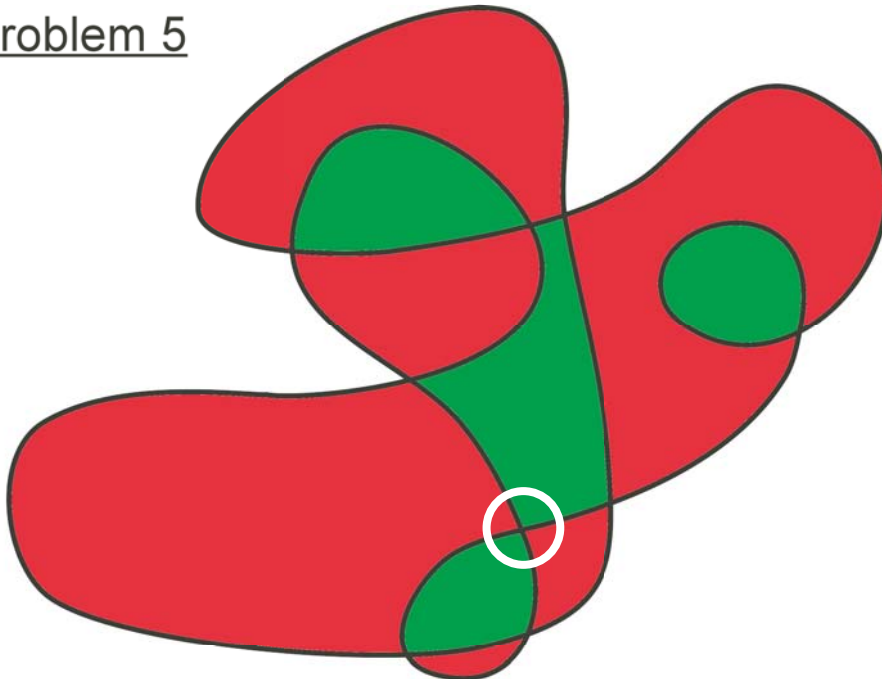
Problem 4



Name _____

1. Circle a Vertex
2. How many edges come from the vertex? 3
3. Is the vertex odd or even? Odd
4. How many colors are needed so that that no two sections that touch are the same color? 3 or 4
5. Did you need to color all the sections to answer question 4? Yes

Problem 5



1. Circle a Vertex
2. How many edges come from the vertex? 4
3. Is the vertex odd or even? Even
4. How many colors are needed so that that no two sections that touch are the same color? 2
5. Did you need to color all the sections to answer question 4? No

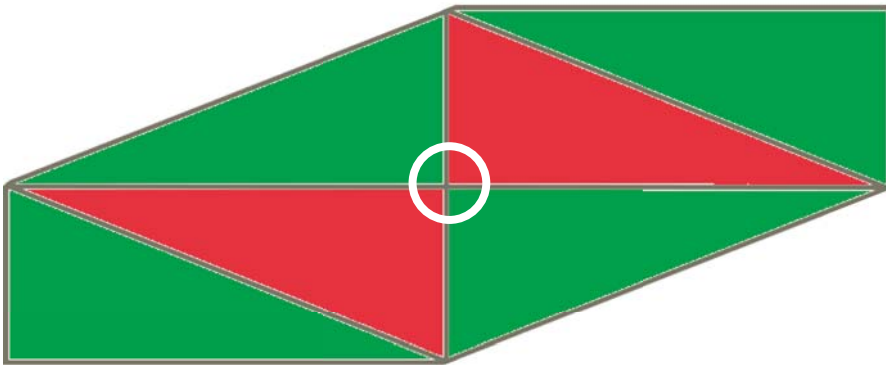
Problem 6



Name _____

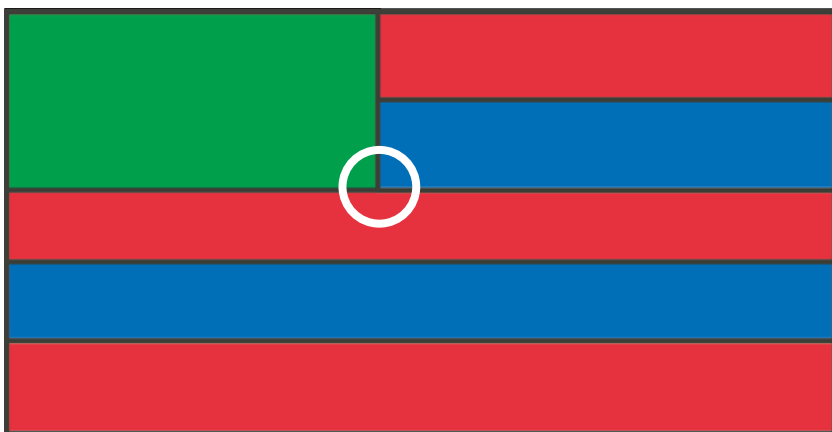
1. Circle a Vertex
2. How many edges come from the vertex? 3
3. Is the vertex odd or even? Odd
4. How many colors are needed so that that no two sections that touch are the same color? 3 or 4
5. Did you need to color all the sections to answer question 4? Yes

Problem 7



1. Circle a Vertex
2. How many edges come from the vertex? 4
3. Is the vertex odd or even? Even
4. How many colors are needed so that that no two sections that touch are the same color? 2
5. Did you need to color all the sections to answer question 4? No

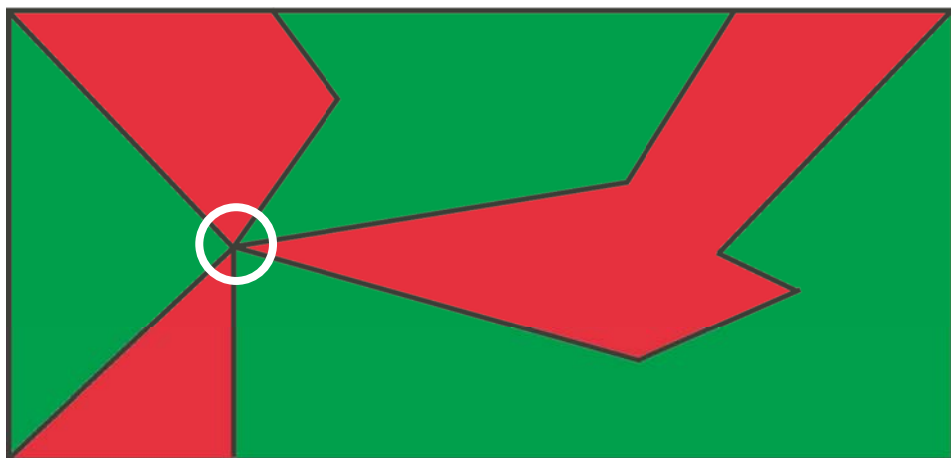
Problem 8



Name _____

1. Circle a Vertex
2. How many edges come from the vertex? 3
3. Is the vertex odd or even? Odd
4. How many colors are needed so that that no two sections that touch are the same color? 3 or 4
5. Did you need to color all the sections to answer question 4? Yes

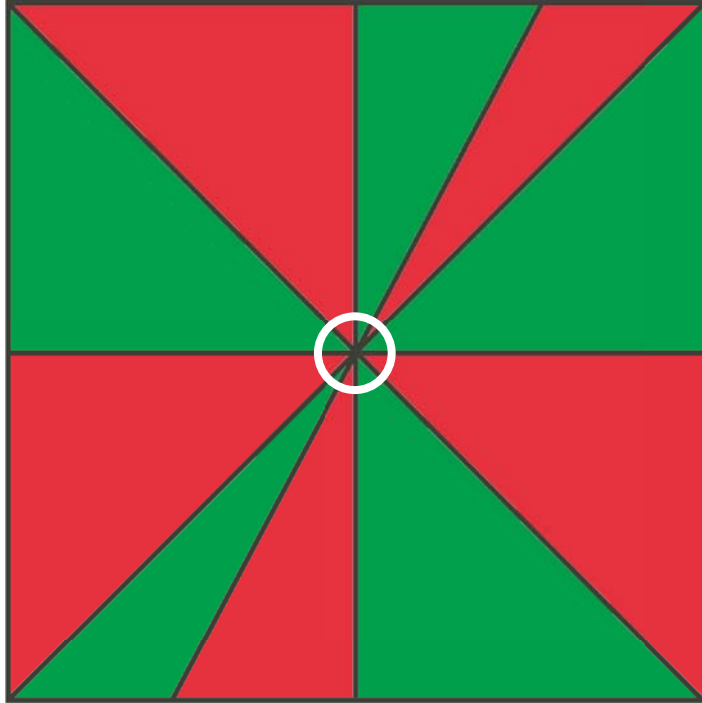
Problem 9



1. Circle a Vertex
2. How many edges come from the vertex? 6
3. Is the vertex odd or even? Even
4. How many colors are needed so that that no two sections that touch are the same color? 2
5. Did you need to color all the sections to answer question 4? No

Problem 10

Name _____



1. Circle a Vertex
2. How many edges come from the vertex? 10
3. Is the vertex odd or even? Even
4. How many colors are needed so that that no two sections that touch are the same color? 2
5. Did you need to color all the sections to answer question 4? No

NOTE:

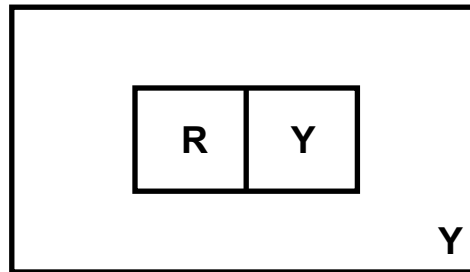
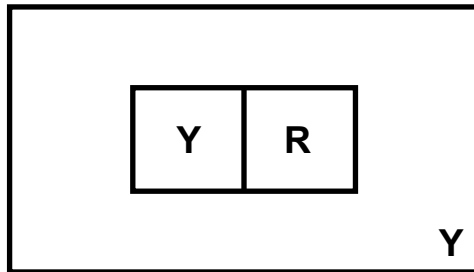
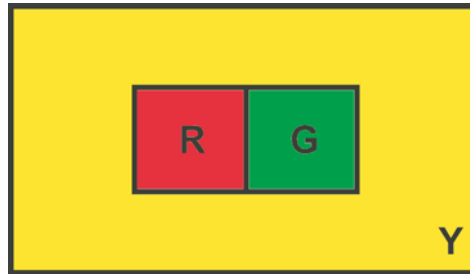
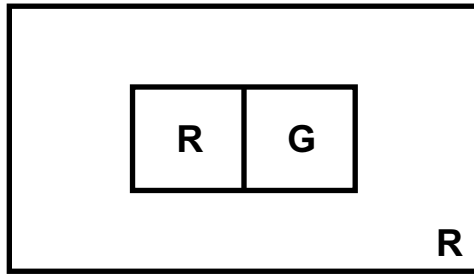
Ignore places where edges meet the Perimeter.

These are **NOT** vertices.

Problem 11

Becky wants to color a design using the smallest number of colors but no two touching edges can be the same color. Which of these could be her design?

R = Red
Y = Yellow
G = Green



Correct answers
are in color

Problem 12

David wants to color a design using the smallest number of colors but no two touching edges can be the same color. Which of these could be his design?

R = Red
Y = Yellow
G = Green
P = Purple
O = Orange

