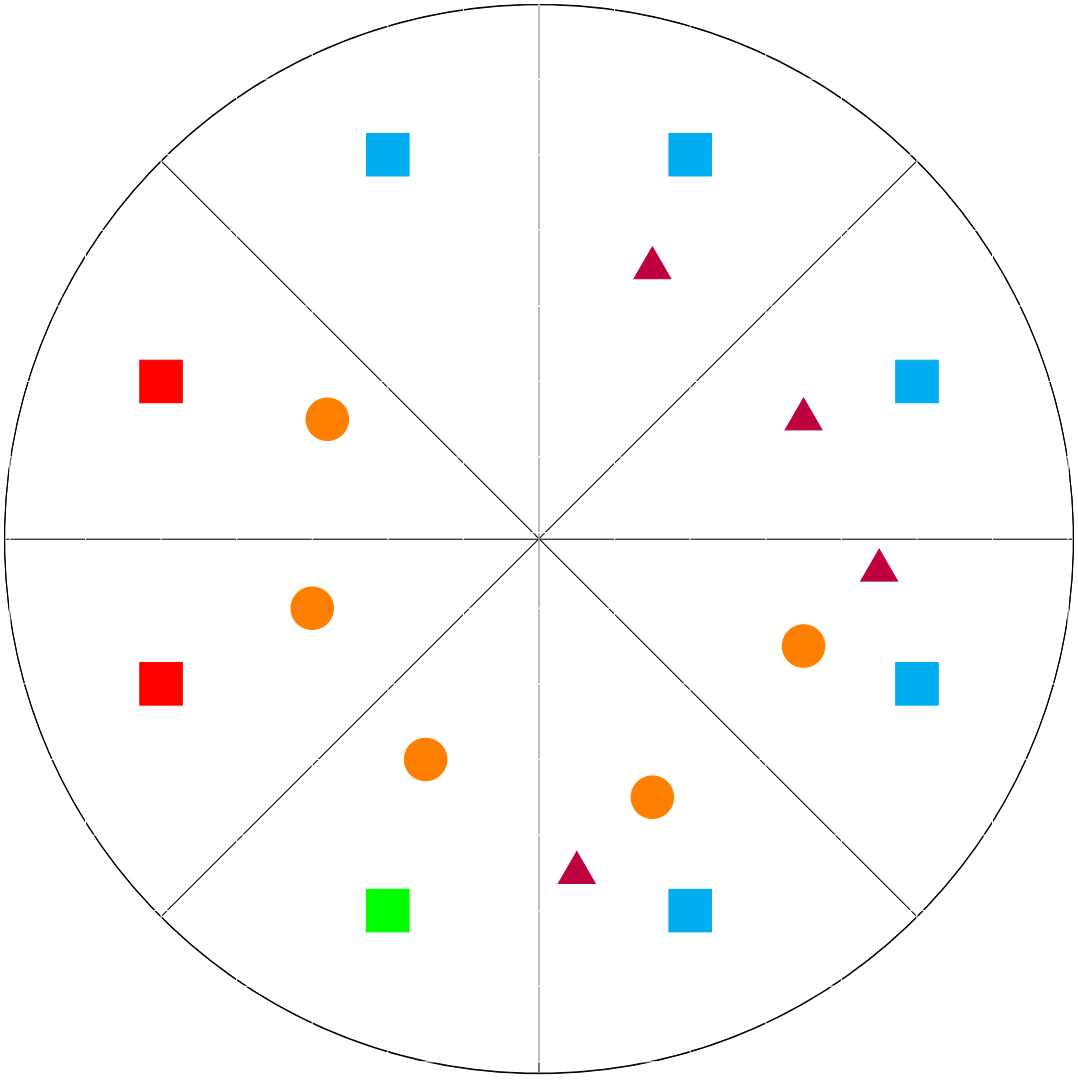
Probability Activity

Consider the following spinner for this activity.



Problem 1. What is the probability that the arrow lands on a blue square sector?

Problem 2. What is the probability that the arrow lands on a green square sector?

Problem 3. What is the probability that the arrow lands on a sector without circles and triangles?

Problem 4. What is the probability that the arrow lands on a sector with purple triangles?

Problem 5. What is the probability that the arrow lands on a sector with orange circles?

Problem 7. What is the probability that the arrow lands on a sector that contains both orange circles and purple triangles?

Problem 8. What is the probability that the arrow lands on a sector that is either blue or green?

Problem 9. In problems 1 and 2 you found the separate probabilities for blue and for green sectors. How does your answer from problem 8 compare to these two? Do you think this pattern will always be true when you find the probability of one thing **OR** another?

Problem 10. Check your intuition from problem 9 and find the probability of landing on a purple triangle or an orange circle. How does this compare to the sum of problems 4 and 5? Did the pattern hold?

Problem 11. Why did the addition case work in problem 9 but not in problem 10? What is different about these two problems? Can you think of a rule that would work in both cases?