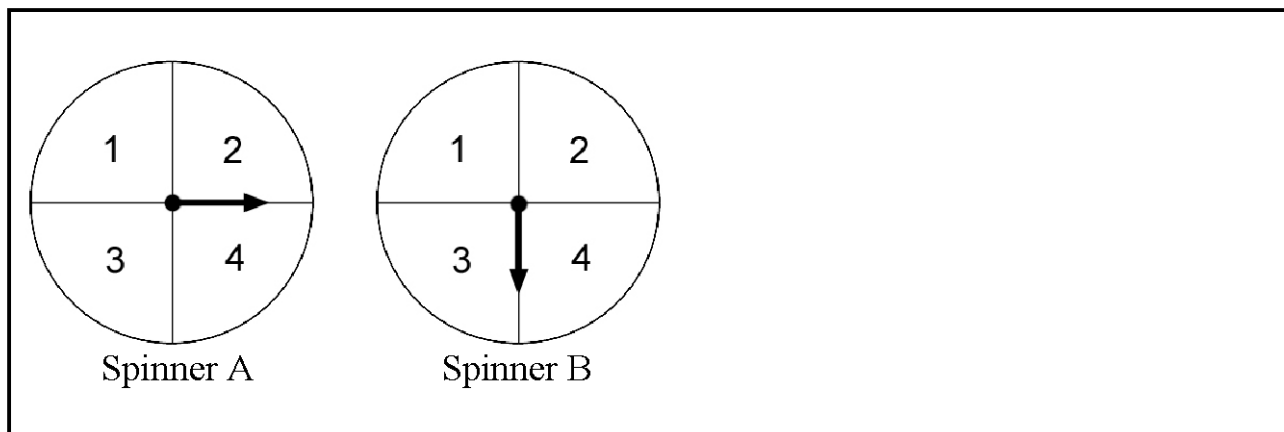


OPEN AND PARALLEL TASKS FOR GRADE 7/LEVEL H

These differentiated tasks are based on the task, “Sum’ Spinners” on page 36 of *Making Sense of Problem Solving: Targeting NCTM Curriculum Focal Points*, Level H/Grade 7, (2008) Teacher to Teacher Publications, Inc.



Open Task

If the ratio of the outcomes of Josie's total spins compared to all of the possible spin outcomes, is equal to $\frac{1}{2}$ what might she have been looking for in each individual spin?

Parallel Tasks

Option 1: If you spin these spinners to find the sum of Spinner A and Spinner B, what is the probability that the outcome will be an odd number?

Option 2: Design a pair of identical spinners so that the probability of getting the sum of 6 is $\frac{1}{3}$.

Notes

There are several things the students could be looking at to get the outcome of $\frac{1}{2}$ in the Open Task. Some possibilities are even sums [2, 4, 4, 6, 4, 6, 6, 8 which would be 8 out of 16 possibilities], odd sums, or an even and odd number for two spins. Struggling students could figure out Option 1 fairly easily if they have been previously taught how to set up a method to record all of the possible outcomes, such as a table showing the sample set or a tree diagram. Option 2 is more complex. Students will have to consider how many segments the spinners could have and what numbers could work.