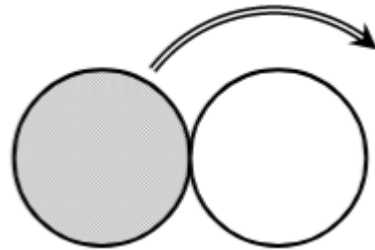


P5 Spring Cup Mathematical Olympiad Sample Questions

1. (SCMO2011R1Q1) Calculate $1 \times 2 + 3 \times 4 + 5 \times 6 + 7 \times 8 + 9 \times 10$
2. (SCMO2012R1Q3) There are four classes in Kangaroo Primary School: class A, class B, class C and class D. If there are 42 students in class A, the number of students in class B is $\frac{6}{7}$ of class A, the number of students in class C is $\frac{5}{6}$ of class B and the number of students in class D is 1.2 times the number of students in class C. There are _____ students in total.
3. (SCMO2019R1Q6) In a garage, it takes 2 fitters and 2 turners to finish a task. If we have 3 fitters, 3 turners and another worker than can work either as a fitter or a turner, how many ways can we select 4 of them to complete the same task?

4. (SCMO2020R2Q3) As shown in the figure below, we have two circles of the same size. If the white circle is fixed in place and the shaded circle rolls around the white circle, by the time it completes one full rotation around the white circle, the area swept over by the shaded circle is _____ times of the area of the white circle.



5. (SCMO2020R2Q10) As shown in the figure below is a symmetrical shape consisting of three squares and one rectangle. If the area of the rectangle is 180 and the area of the biased square at the center is 54, what is the sum of the area of the two squares on the left and right?

