



Problem of the Week

Problem E

What is Possible?

Four cards each have a different positive integer printed on one side. Also, one card is purple, one card is blue, one card is green, and one card is yellow. (For those without a colour printer, the colour of the card is printed below the card.)

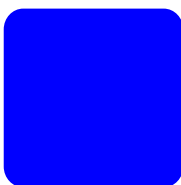
The four cards are placed on a table so that the numbered side is face down. Students look at the numbers on exactly three of the cards and then state the sum.

One student looked under the purple, blue and green cards and stated that the sum was 14. A second student looked under the blue, green and yellow cards and stated that the sum was 18. Finally, a third student looked under the purple, green and yellow cards and stated that the sum was 19.

Determine all possibilities for the positive integers on the purple, blue, green and yellow cards.



PURPLE



BLUE



GREEN



YELLOW

