

MATHCOUNTS[®] Problem of the Week Archive

National High Five Day! – April 15, 2024

Problems

The 3rd Thursday in April (April 18, 2024) is National High Five Day!

For National High Five Day, Ronnie's class decides that everyone in the class should exchange one high five with each other person in the class. If there are 20 people in Ronnie's class, how many high fives will be exchanged?

At the end of Ronnie's lacrosse game, every player on his team high-fived every member of the opposing team once and said "good game." If each team had 15 members, how many high fives were exchanged?

In an effort to spread "high-fiving cheer" Ronnie and Ruth decided they would each high five 2 people and ask each person they high five to high five 2 additional people (and ask each of them to do the same). After 4 cycles like this, how many high fives will be exchanged?