

Name _____



REUSE, RECYCLE, RENOVATE

Ordering Materials

For each of the following questions, write and solve an algebraic equation.

1. Each of the four wings will need 200 receptacles and 4 boxes of wire. To wire all four wings, you will need 800 receptacles and 8000 feet of wire. How many feet of wire are in one box?
2. Each ceiling fan requires 30 feet of wire to connect the on/off switch. How many fans will use 120 feet of wire?
3. An order arrives with 7 boxes of wire nuts and 50 wire nuts in a plastic bag. You ordered 680 wire nuts. If the order was filled correctly, how many wire nuts are in each box?
4. Seven boxes each contain two panels and a box of breakers. If you ordered 14 panels and 140 breakers, how many breakers are in each box?
5. Each bathroom needs a ground fault plug. There are 8 bathrooms in the office wing. You need a total of 24 ground fault plugs for the office wing and the homeless shelter wing. If $\frac{1}{2}$ of the ground fault plugs in the homeless shelter are for wash areas, how many ground fault plugs for the homeless shelter are for bathrooms?