

```

boolean isPostfix(String e) {

    // cannot have even expressions under current constraints
    if(e.length() % 2 != 1) {
        return false;
    }
    char c = e.charAt(0);

    // ensures that the last remaining character is not an operator
    if(e.length() == 1) {
        if(c == '*' || c == '/' || c == '+' || c == '-') {
            return false;
        } else {
            return true;
        }
    }

    // makes sure loop doesn't go out of bounds of expression
    int index = 0;
    while(index < e.length()) {

        // pull character
        c = e.charAt(index);

        // check for operand, removed first operand and previous character
        if(c == '*' || c == '/' || c == '+' || c == '-') {
            String new_e = "";

            // adds from beginning to character before operand
            new_e += e.substring(0, index-1);

            // adds from character after operand to end
            new_e += e.substring(index+1, e.length());

            // recursive with 1 less character and operator
            return isPostfix(new_e);

        }
        index++;
    }

    // ensures there is only 1 more non-operator than operator
    return false;
}

```