

**Elementary Division**

考号/Exam Code: \_\_\_\_\_ 姓名/Name: \_\_\_\_\_ 学校/School: \_\_\_\_\_

**1. Prefix/Infix/Postfix**

Evaluate the following prefix expression:

$$- * 5 3 / + / 6 2 * 7 3 2$$

1.

**2. Prefix/Infix/Postfix**

Evaluate the following postfix expression:

$$5 2 ^ 7 3 + 6 4 - * + 3 2 ^ /$$

2.

**3. Prefix/Infix/Postfix**

Translate the following infix expression to postfix:

$$7 * (9 + 1 ^ 2 - 6 / 3)$$

3.

**4. Prefix/Infix/Postfix**

Translate the following infix expression to postfix:

$$\frac{2+6}{4} * \frac{8}{4-2} * 3^{7-5}$$

4.

**5. Prefix/Infix/Postfix**

Translate the following postfix expression to prefix:

$$9 3 + 7 4 5 + * + 4 1 + 2 ^ /$$

5.

# ACSL

2018 - 2019

American Computer Science League

Contest #2

## Elementary Division

考号/Exam Code: \_\_\_\_\_ 姓名/Name: \_\_\_\_\_ 学校/School: \_\_\_\_\_

### 1. Prefix/Infix/Postfix

计算下述前缀表达式的值:

$$- * 5 3 / + / 6 2 * 7 3 2$$

1.

### 2. Prefix/Infix/Postfix

计算下述后缀表达式的值:

$$5 2 ^ 7 3 + 6 4 - * + 3 2 ^ /$$

2.

### 3. Prefix/Infix/Postfix

将下述中缀表达式转换为后缀表达式:

$$7 * (9 + 1 ^ 2 - 6 / 3)$$

3.

### 4. Prefix/Infix/Postfix

将下述中缀表达式转换为后缀表达式:

$$\frac{2 + 6}{4} * \frac{8}{4 - 2} * 3^{7-5}$$

4.

### 5. Prefix/Infix/Postfix

将下述后缀表达式转换为前缀表达式:

$$9 3 + 7 4 5 + * + 4 1 + 2 ^ /$$

5.