

Worksheet 10A

Quiz 1: A-Normal Form

What is the A-Normal Form of the following expression?

```
((2 + 3) * (12 - 4)) * (7 + 8)
```

Quiz 2: Making Arguments Immediate

Fill in the blanks for `to_imm` which converts an expression into an immediate value plus a vector of ANF let-bindings.

```
fn to_imm(&self, count: &mut usize,
  binds: &mut RVec<(Id, Anf)>) -> Imm {
  match self {
    Exp::Var(_) | Exp::Num(_) =>

    Exp::Bin(op, e1, e2) => {

  }
  Exp::Let(..) => {

  }
}
}
```

Quiz 3: Top-Level Conversion: *to_anf*

Fill in the blanks for `to_anf` which converts an expression into A-Normal Form.

```
fn to_anf(&self, count: &mut usize) -> Anf {
  match self {
    Exp::Var(_) | Exp::Num(_) =>

    Exp::Let(x, e1, e2) => {

    }
    Exp::Bin(op, e1, e2) => {

    }
  }
}
```

Quiz 4: *Your turn!*

What is something you found confusing in today's lecture (or earlier)?