Chapter 11 Review Questions

1.
```
Stonewt Stonewt::operator*(double factor)
{
    Stonewt product;
    product.pounds = pounds * int(factor);
    product.stone = pounds / Lbs_per_stn;
    product.pds_left = pounds % Lbs_per_stn;
    return product;
}
```

Or

```
Stonewt::operator*(double factor)
{
    return Stonewt(factor * pounds);
}
```

2. A member function is part of a class definition, while a friend is not. However, the friend function has the same access rights to an object as a member function. A friend function must use the membership operator to access members of an object.

3. A nonmember function must be a friend to access a class' private members but not its public members.

4.
```
// insert into class declaration
friend Stonewt operator*(double factor, const Stonewt foo)

// function definition
Stonewt operator*(double factor, const Stonewt foo)
{
    return Stonewt(factor * s.pounds);

}
```

5. Page 573 includes a list of operators that cannot be overloaded. In addition, one can't create new operator symbols.

6. Only member functions can be used to overload those operators.

7.
```
// insert into class declaration
operator double() const;
```

```
// function definition
Vector::operator double() const
{
   return mag;
}
```