Arithmetic in C++

Arithmetic expressions can be made up of constants, variables, operators and parentheses. The *arithmetic operators* in C++ are as follows

+	(addition)
-	(subtraction)
*	(multiplication)
/	(division)
%	(modulus - the remainder from integer division)

NOTE: The % operator may appear ONLY with integer values.

When expressions are evaluated, they are evaluated left to right according to the following *precedence rules*:

( )
* / %
+ -

The expression 4 + 8 / 2 is evaluated as follows:

4 + 8 / 2 = (division has the highest precedence)
4 + 4 = 8

The expression (4 + 8) / 2 is evaluated as follows:

(4 + 8) / 2 = (parentheses have the highest precedence)
12 / 2 = 6

The expression 8 % 3 is evaluated as follows:

8 % 3 = 2 (the whole number remainder)

The expression 8 % 3.0 would be invalid (3.0 is a floating point value and therefore not valid), as would the expression 8.0 % 3.

Evaluate the following expressions:

1) 12 / 3 * 3 =

2) 10 % 3 – 6 / 2 =

3) 5.0 * 2.0 / 4.0 * 2.0 =

4) 5.0 * 2.0 / (4.0 * 2.0) =

5) 5.0 + 2.0 / (4.0 * 2.0)