

ITSE 2321 – OBJECT-ORIENTED PROGRAMMING JAVA

Homework 2 – Arithmetic Expression

NAME: _____ (40 points)

1. Given the declarations and initializations below, evaluate the following Java expressions. Format values to at least **one decimal** where necessary.

```
int    i = -2,  j = 3,  k = 2,  m = 4;
double w = 4.5, x = 4.2, y = 6;
```

a) $w + m / k$

Value: _____

Data Type: _____

b) $(y + x) / i$

Value: _____

Data Type: _____

c) $(15 + k) \% j - 1$

Value: _____

Data Type: _____

d) $x / i * j - 1$

Value: _____

Data Type: _____

e) $j - m * -i$

Value: _____

Data Type: _____

f) $y / (5 - j)$

Value: _____

Data Type: _____

g) $i + x - j * i / 1$

Value: _____

Data Type: _____

h) $15 \% j - (x / i)$

Value: _____

Data Type: _____

i) $y / i * j - 1$

Value: _____

Data Type: _____

```
int    i = -2,  j = 3,  k = 2,  m = 4;
double w = 4.5, x = 4.2, y = 6;
```

j) $k / m * i$

Value: _____

Data Type: _____

k) $10 \% j - (x / i)$

Value: _____

Data Type: _____

j) $y / (i * (j - 1))$

Value: _____

Data Type: _____

m) $i + (11 \% k) / m * i$

Value: _____

Data Type: _____

n) $j - m \% 3 * i$

Value: _____

Data Type: _____

o) $j - m \% 5 * i$

Value: _____

Data Type: _____

2. Write Java expressions for the following algebraic expression:

a) $a = -2x + 2$

b) $z = 5x + 14y + 5k$

c) $c = k \frac{xb^3}{b-k^2}$

d) $g = \frac{h+12}{4k}$

e) $c = \frac{a^3}{b^2k^3}$
