

Class 5 Homework

For each of the following problems figure out the output type. The available options are:

1. byte
2. short
3. int
4. long
5. float
6. double
7. char
8. fails to compile

You may use a computer to work out the answers. Make sure to guess before running code.

1. What is the output type of the following:

```
long x = 5;  
long y = 6;  
x + y;
```

2. What is the output type of the following:

```
float x = 2.1;  
double y = 3.2;  
x - y;
```

3. What is the output type of the following:

```
short x = 7;  
int y = 6;  
x * y;
```

4. What is the output type of the following:

```
byte x = 0;  
short y = 3;  
x + y;
```

5. What is the output type of the following:

```
long x = 200;  
double y = 3.5;  
x / y;
```

6. What is the output type of the following:

```
byte x = 3;  
long y = 72;  
x * y;
```

7. What is the output type of the following:

```
float x = 3.1f;  
long y = 10000;  
x / y;
```

8. What is the output type of the following:

```
char x = 'a';  
int y = 2;  
x + y;
```

9. What is the output type of the following:

```
int x = 32;  
int y = 2;  
(double) x / y;
```

10. What is the output type of the following:

```
float x = 32;  
float y = 2;  
(int) x * (int) y;
```