

Exercises 4.2

Learn C With Babbo

1. Give the output of the following statements

(a)

```
int a = 1.5;
printf("%d\n", a);
```

(b)

```
float a = 3 + 9;
printf("%.0f\n", a);
```

```
int a = 3.14;
float b = a * 2;
printf("%.2f\n", b);
```

2. For each of the following items, say what the type of the result of the expression is.

(a) `3 * 7`

(b) `2 / 7.4`

(c) `2L + 3.7f`

(d) `3 % 7L`

(e) `2.5f + 3.5`

(f) `2.5 + 3.5`

3. Suppose I have the following function defined:

```
double combine(int num1, double num2, int num3) {
    return num1 + num2 + num3;
}
```

What is the output of the following statement?

```
printf("%.2f\n", combine(6.4, 8, -1.5));
```

4. Explain why implicit conversion of integral values to floating point values is generally harmless, but the implicit conversion of floating point values to integral values is often undesirable.