

Errors:

- * Syntax Error (Compile Error)
- * Runtime — (Exception)
- * Logic Error

input
Storage
Process
Output

Salary → Variable
byte, short, int, long
float, double
char, String

$$\text{annualSalary} = \text{salary} \times 12$$

mark	fullMark
23	25

$$\text{pct} = \frac{\text{mark}}{\text{fullMark}} \times 100$$

92

Math Operators:

- ① $*$, $/$, $\%$
- ② $+$, $-$

$$5 / 2 \Rightarrow 2$$

$$5.0 / 2 \Rightarrow 2.5$$

int x = 5;

int y = 2;

$$x / y \Rightarrow 2$$

(double) x / y \Rightarrow 2.5

Casting

$$7 \% 3 \Rightarrow 1$$

$$11 \% 3 \Rightarrow 2$$

$$10 \% 2 \Rightarrow 0$$

$$3 + 6 / 2$$

$$(6 / 2) \times 3$$

Assignment Operator:

int x = 5;	<u>5</u>	x ++;
x = 3;	3	Sout(x ++); \Rightarrow 26
x = (x + 5);	3 8	Sout(++x); \Rightarrow 28
x += 2;	10 30	Sout(x --); \Rightarrow 28
x *= 3;	25 26	
x -= 5;	27 28	
	27	

Common Methods:

$$\text{Math.pow}(5, 2) \Rightarrow 25$$

$$\text{Math.sqrt}(25) \Rightarrow 5.0$$

$$\text{Math.max}(5, 2) \Rightarrow 5$$

$$\text{Math.min}(5, 2) \Rightarrow 2$$

$$\text{Math.round}(19.6) \Rightarrow 20$$

$$\text{Math.random()} \rightarrow 0.2$$

$$0.5 \rightarrow 0.7$$

$$19.6666 \times 100$$

weight	height
68	182

$$\text{bmi} = \frac{\text{weight}}{(\text{height} / 100)^2}$$

20.5 —

0599888921

HV

Page 69

(2.1), (2.2), (2.5)

