

Tölvunarfræði 1 Heimadæmi 2

Dæmi 1

```
public class EvenDiv {  
  
    public static void main (String[] args) {  
  
        int a = Integer.parseInt(args[0]);  
        int b = Integer.parseInt(args[1]);  
  
        if (a % b == 0 || b % a == 0) {  
  
            System.out.println("True");  
        }  
  
        else System.out.println("False");  
    }  
}
```

Dæmi um keyrslu:

```
java EvenDiv 6 2  
True
```

Dæmi 2

```
public class BMI {  
  
    public static void main (String[] args) {  
  
        double tyngd = Double.parseDouble(args[0]);  
        double haed = Double.parseDouble(args[1]);  
        System.out.println("BMI stuðull er " + tyngd/(haed*haed));  
    }  
}
```

Dæmi um keyrslu:

```
java BMI 65 1.8  
BMI stuðull er 20.061728395061728
```

Dæmi 3

```
public class SlembiBil {  
  
    public static void main (String[] args) {  
  
        double a = Double.parseDouble(args[0]);  
        double b = Double.parseDouble(args[1]);  
        double ran = Math.random()*(b-a)+a;  
  
        System.out.println(ran);  
    }  
}
```

Dæmi um keyrslu:

```
java SlembiBil 0.05 0.06  
0.053596259366244986
```

Dæmi 4

```
public class Pizza {  
  
    public static void main (String[] args) {  
  
        double tommur = Double.parseDouble(args[0]);  
        double sm = tommur * 2.54;  
        double rad = sm / 2;  
        double flat = Math.PI * rad * rad;  
        int nemi = (int) flat / 500;  
  
        if (nemi == 1) {  
            System.out.println("Þessi pizza nægir fyrir " + nemi + " nema");  
        }  
        else  
  
            System.out.println("Þessi pizza nægir fyrir " + nemi + " nemendur");  
    }  
}
```

Dæmi um keyrslu:

```
java Pizza 16  
Þessi pizza nægir fyrir 2 nemendur
```

```
java Pizza 12  
Þessi pizza nægir fyrir 1 nema
```

Dæmi 5

```
public class EindaKerfi {  
  
    public static void main (String[] args) {  
  
        double fjarlægð = Double.parseDouble(args[0]);  
        double massi1 = Double.parseDouble(args[1]);  
        double massi2 = Double.parseDouble(args[2]);  
  
        double miðja = fjarlægð*(massi2/(massi1+massi2));  
  
        System.out.println(miðja);  
    }  
}
```

Dæmi um keyrslu:

```
java EindaKerfi 19600 0.0021 0.000254  
2114.868309260833
```
