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Mata Kuliah : Pemrograman Berorientasi Objek

1. Listing Kode

```
<?php
// =====
// Class Persegi Panjang
// =====

class PersegiPanjang {
    // Property
    public $panjang;
    public $lebar;

    // Constructor
    public function __construct($panjang, $lebar) {
        $this->panjang = $panjang;
        $this->lebar = $lebar;
    }

    // Method menghitung luas
    public function hitungLuas() {
        return $this->panjang * $this->lebar;
    }

    // Method menghitung keliling
    public function hitungKeliling() {
        return 2 * ($this->panjang + $this->lebar);
    }
}
```

```

// =====
// Class Trapesium
// =====

class Trapesium {
    // Property
    public $panjang; // sisi atas
    public $lebar; // sisi bawah
    public $tinggi;
    public $sisiMiring1;
    public $sisiMiring2;

    // Constructor
    public function __construct($panjang, $lebar, $tinggi, $sisiMiring1, $sisiMiring2) {
        $this->panjang = $panjang;
        $this->lebar = $lebar;
        $this->tinggi = $tinggi;
        $this->sisiMiring1 = $sisiMiring1;
        $this->sisiMiring2 = $sisiMiring2;
    }

    // Method menghitung luas
    public function hitungLuas() {
        return 0.5 * ($this->panjang + $this->lebar) * $this->tinggi;
    }

    // Method menghitung keliling
    public function hitungKeliling() {
        return $this->panjang + $this->lebar +
            $this->sisiMiring1 + $this->sisiMiring2;
    }
}

```

```

}

// =====
// Class Lingkaran
// =====
class Lingkaran {
    // Property
    public $panjang; // digunakan sebagai jari-jari
    public $lebar; // tambahan property sesuai soal

    // Constructor
    public function __construct($panjang, $lebar) {
        $this->panjang = $panjang; // jari-jari
        $this->lebar = $lebar;
    }

    // Method menghitung luas
    public function hitungLuas() {
        return pi() * $this->panjang * $this->panjang;
    }

    // Method menghitung keliling
    public function hitungKeliling() {
        return 2 * pi() * $this->panjang;
    }
}

// =====
// Membuat Objek
// =====

```

```
// Objek Persegi Panjang
```

```
$persegi = new PersegiPanjang(10, 5);
```

```
echo "=== Persegi Panjang === <br>";
```

```
echo "Panjang : " . $persegi->panjang . "<br>";
```

```
echo "Lebar : " . $persegi->lebar . "<br>";
```

```
echo "Luas : " . $persegi->hitungLuas() . "<br>";
```

```
echo "Keliling: " . $persegi->hitungKeliling() . "<br><br>";
```

```
// Objek Trapesium
```

```
$trapesium = new Trapesium(8, 12, 6, 5, 5);
```

```
echo "=== Trapesium === <br>";
```

```
echo "Sisi Atas : " . $trapesium->panjang . "<br>";
```

```
echo "Sisi Bawah : " . $trapesium->lebar . "<br>";
```

```
echo "Tinggi : " . $trapesium->tinggi . "<br>";
```

```
echo "Luas : " . $trapesium->hitungLuas() . "<br>";
```

```
echo "Keliling : " . $trapesium->hitungKeliling() . "<br><br>";
```

```
// Objek Lingkaran
```

```
$lingkaran = new Lingkaran(7, 0);
```

```
echo "=== Lingkaran === <br>";
```

```
echo "Jari-jari : " . $lingkaran->panjang . "<br>";
```

```
echo "Luas : " . $lingkaran->hitungLuas() . "<br>";
```

```
echo "Keliling : " . $lingkaran->hitungKeliling() . "<br>";
```

```
?>
```

2. Hasil



```
← → ↻ ⓘ localhost/oop%20ais/persegi.php

--- Persegi Panjang ---
Panjang : 10
Lebar : 5
Luas : 50
Keliling: 30

--- Trapesium ---
Sisi Atas : 8
Sisi Bawah : 12
Tinggi : 6
Luas : 60
Keliling : 30

--- Lingkaran ---
Jari-jari : 7
Luas : 153.9380400259
Keliling : 43.982297150257
```