

## Facitliste

405:

```
> (1+2*I)^2+1/2*(1+I)*(1+I^8);
```

$$-2 + 5I$$

```
> (2+5*I)/(3-7*I)^2+(2+3*I)*(3-4*I);
```

$$\frac{1039}{58} + \frac{28}{29}I$$

407:

```
> convert(2+2*I,polar);
```

$$\text{polar}\left(2\sqrt{2}, \frac{\pi}{4}\right)$$

```
> convert(sqrt(3)-I,polar);
```

$$\text{polar}\left(2, -\frac{\pi}{6}\right)$$

```
> convert(-1/6+I/(2*sqrt(3)),polar);
```

$$\text{polar}\left(\frac{1}{3}, \frac{2\pi}{3}\right)$$

410:

```
> (1+I)^8;
```

$$16$$

411:

```
> (sqrt(3)+I)^6/(2-2*I*sqrt(3))^3;
```

$$\frac{(\sqrt{3} + I)^6}{(2 - 2I\sqrt{3})^3}$$

```
> evalc(%);
```

$$1$$

449:

```
> expand((3+sqrt(3)*I)^4/(1+I*sqrt(3))^3);
```

$$-\frac{72}{(1+\sqrt{3}I)^3} + \frac{72I\sqrt{3}}{(1+\sqrt{3}I)^3}$$

```
> evalc(%);
```

$$9 - 9I\sqrt{3}$$

```
> convert(%,polar);
```

$$\text{polar}\left(18, -\frac{\pi}{3}\right)$$

```
>
```