**Oefeningen VERWANTE HOEKEN ( met oplossingen)**

 **Vul volgende tabel aan**

|  |  |  |  |
| --- | --- | --- | --- |
| **Hoek** | **TEGENGESTELDE HOEK** | **SUPPLEMENTAIRE HOEK** | **ANTISUPPLEMENTAIRE HOEK** |
| **70°** |  |  |  |
| **128°** |  |  |  |
| **220°** |  |  |  |
| **321°** |  |  |  |
| **-135°** |  |  |  |
| **680°** |  |  |  |
| **-1640°** |  |  |  |
| **885°** |  |  |  |

**Schrijf de goniometrische getallen met een positieve hoek , kleiner dan 90°**

|  |  |
| --- | --- |
| **sin ( 240° ) =** | **cos ( 330°) =**  |
| **sin ( 120 ° ) =** | **cos ( 220°) =** |
| **sin ( -1020°) =** | **sin ( 840°) =** |
| **cos ( -620°) =** | **cos ( 550° ) =** |
| **sin ( 813°) =** | **cos ( -421° )** |

**Vereenvoudig**

|  |  |
| --- | --- |
| **sin ( 35°) / sin (145°) =** | **cos ( 210 ° ) / cos ( 30°) =** |
| **sin ( 40° ) / sin ( 220 °) =** | **sin (50°)/ cos ( 310°) =** |
| **sin ( 410° )/ sin (230°) =** | **cos ( 950°) / cos ( 130° )** |

70°/290°/110°/250°//128°/232°/52°/208°//220°/140°/320°/40°//321°/39°/219°/141°

-135°=225°/135°/315°/45°//680°=320°/40°/200°/140°//-1640°=160°/200°/20°/340°//885°=165°/195°/15°/345°

-sin(60°)/cos(30°)//sin(60°)/-cos(40°)//sin(60°)/sin(60°)//-cos(80°)/-cos(10°)/sin(87°)/cos(61°)

**Duid de hoek 240 ° aan op de cirkel**

**Duid vervolgens aan en geef ook hun waarde:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Hoek** | **AntiSupplement** | **Tegengestelde** | **Supplement** |
| **Beeldpunt** | **A** | **T** | **S** |

**( 60° , 120° , 300°)**

**Duid de hoek -240° aan op de cirkel**

**Duid vervolgens aan en geef ook hun waarde:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Hoek** | **AntiSupplement** | **Tegengestelde** | **Supplement** |
| **Beeldpunt** | **A** | **T** | **S** |

**( 300° , 240° , 60°)**