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|--|---------------|--|---------------------------|------------------|
| | Navn: | | Skole: | |
| | Klasse: 20 | | Dato: 22. februar 2022 | Fag: Matematik A |

Opgave 298

$$f(t) = 1 - \sin(3t)$$

Opgave A

$$\omega = 3$$

$$T = \frac{2\pi}{\omega}$$

$$T = \frac{2\pi}{3} = 2,094395$$

Opgave B

$$Maks = 2$$

$$2 = 1 - \sin(3t)$$

$$2 - 1 = -\sin(3t) \quad \text{flyt 1}$$

$$1 = -\sin(3t) \quad \text{Reducer}$$

$$\sin^{-1}(1) = -3t \quad \sin^{-1} \text{ på begge sider}$$

$$\frac{\sin^{-1}(1)}{-3} = t \quad \text{divider med } -3$$

$$t = \frac{\sin^{-1}(1)}{-3} \quad \text{Byt sode}$$

$$t = -0,5235988 \quad \text{Udregn}$$

Opgave C

$$Min = 0$$

$$0 = 1 - \sin(3t)$$

$$0 - 1 = -\sin(3t) \quad \text{flyt 1}$$

$$-1 = -\sin(3t) \quad \text{Reducer}$$

$$\sin^{-1}(-1) = -3t \quad \sin^{-1} \text{ på begge sider}$$

$$\frac{\sin^{-1}(-1)}{-3} = t \quad \text{divider med } -3$$

$$t = \frac{\sin^{-1}(-1)}{-3} \quad \text{Byt side}$$

$$t = 0,5235988 \quad \text{Udregn}$$