QUIZ 5.1 – 5.3

1. Determine the amplitude and the period in degrees and in radians.
a) $y=2 cosθ$

b) $y=-3\cos(\left(\frac{1}{2}θ\right))$

c) $y=0.25\sin(\left(0.25θ\right))$
2. Determine the amplitude and the period in radians :
a)
**
b)
**
3. Identify the characteristics (amplitude, max, min, period, intercepts) for both functions and graph $y= -2\sin(\left(4θ\right))$ on at least 2 periods.
a)

|  |  |  |
| --- | --- | --- |
|  | $$y=\sin(θ)$$ |  $y= -2\sin(\left(4θ\right))$ |
| Amplitude |  |  |
| max |  |  |
| min |  |  |
| period |  |  |
| *y*-intercept |  |  |
| $θ$ -intercepts |  |  |


b) Same question with no graphing.

|  |  |  |
| --- | --- | --- |
|  | $$y=\cos(θ)$$ | $$y=2\cos(\left(\frac{1}{2}θ\right))$$ |
| Amplitude |  |  |
| max |  |  |
| min |  |  |
| period |  |  |
| *y*-intercept |  |  |
| $θ$ -intercepts |  |  |

|  |  |  |
| --- | --- | --- |
|  | $$y= -5\sin(\left(\frac{1}{2}\left(θ-90°\right)\right)+15)$$ | $$y=\cos(\left(\frac{1}{3}\left(θ-π\right)\right)+3)$$ |
| amplitude |  |  |
| period |  |  |
| Phase shift |  |  |
| Centre line |  |  |
| domain |  |  |
| Range |  |  |

1. Same question and graph $y=\cos(\left(\frac{1}{3}\left(θ-π\right)\right)+3)$ :
**
2. Graph  over 2 periods, give its domain, its period and the equations of its asymptotes, *x* is in radians.



1. Determine the equation of the function represented below. Explain why you chose cos or sin.

**
2. Determine the equation of the function represented below. Explain why you chose cos or sin.

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