

Quiz

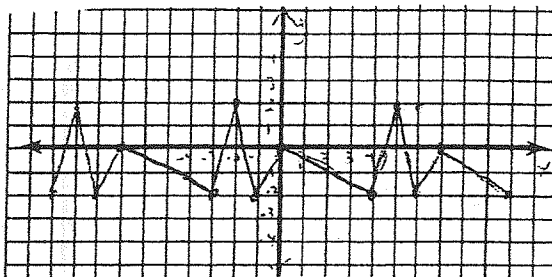
$$\frac{15+1}{16} = \frac{16}{16}$$

Name Solutions

1. Given the graph of the periodic function, $f(x)$, determine: [6]

- a) period 7 ✓
- b) max value 2 ✓
- c) min value -2 ✓
- d) amplitude 2 ✓
- e) $f(4)$ -2 ✓
- $f(32)$ -2 ✓

$$y = f(x)$$

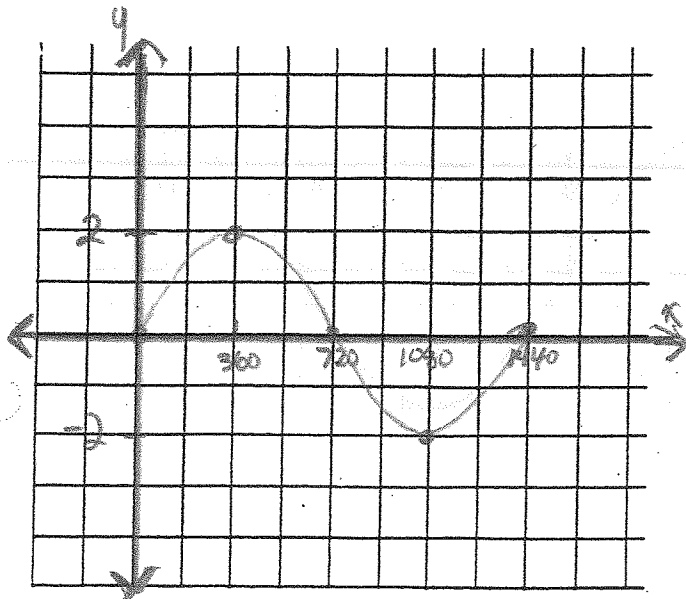


2. Complete the table. [3]

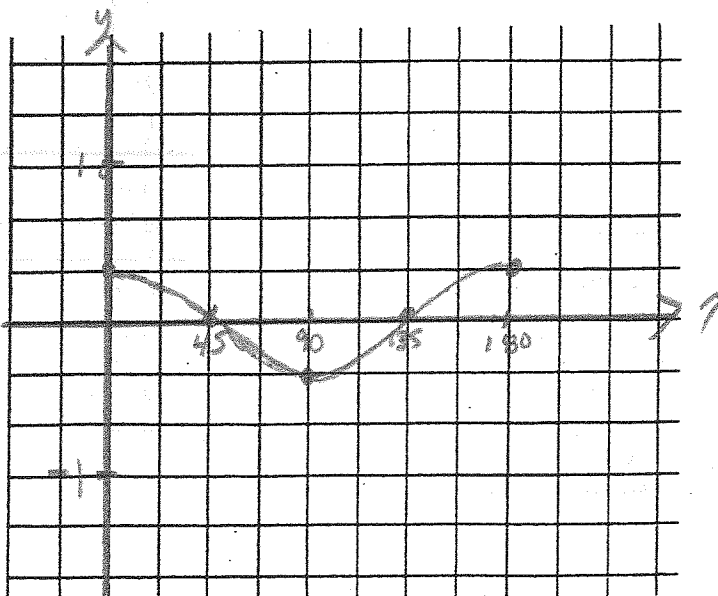
Equation	Period	Amplitude
$y = 5 \sin 3x$	120	5
$y = \frac{1}{2} \cos(\frac{1}{3}x)$	1080	$\frac{1}{2}$
$y = 8 \sin(4x)$	90°	8

3. Graph one cycle of each of the following. [6]

a) $y = 2 \sin(\frac{1}{4}x)$



b) $y = \frac{1}{3} \cos(2x)$



For each of the following, state the reflection, amplitude, period, phase shift, scale and vertical shift. Then graph one cycle of each function.

1. $y = -3\sin(5x) + 2$

reflect in x axis

amp = 3

pd = $\frac{360}{5}$

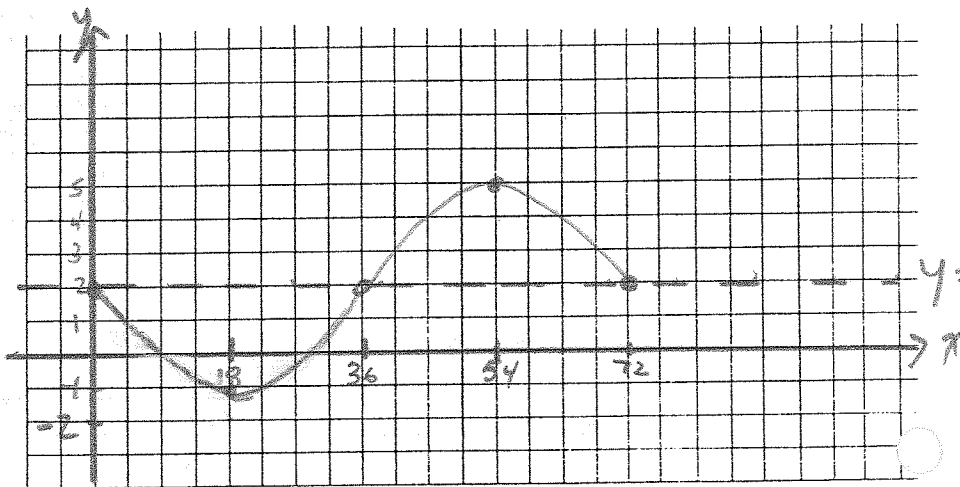
= 72

ps. none

scale = $\frac{72}{4}$

= 18

vs. up 2



2. $y = 4\cos(2x - 90) - 3$

= $4\cos(2(x - 45)) - 3$

reflect: none

amp = 4

pd = $\frac{360}{2}$

= 180

ps. RT 45

Scale = $\frac{180}{4}$

= 45

vs down 3

