**Graphing Trigonometric Functions /40**

**Short Answer**

**1.** For the cosine function graphed below, determine the:

|  |  |
| --- | --- |
| • amplitude  • period  • equation of the centre line  • phase shift | • maximum value  • minimum value  • domain  • range |

**and write a possible equation**.



**2.** Write an equation that represents the sine function graphed below.



**Problem**

**3.** Sketch the graph of a sine function with amplitude 3, period , equation of centre line , and phase shift . Label the graph with its equation.



**4.** Sketch the graph of a cosine function with amplitude 4, period , equation of centre line , and phase shift . Label the graph with its equation.



**5.** Sketch the graph of .

Describe these characteristics of the function: amplitude, period, phase shift, equation of the centre line, domain, and range



**6.** Sketch the graph of .

Describe these characteristics of the function: amplitude, period, phase shift, equation of the centre line, domain, and range



**7.** Write an equation in the form  for the graph below. **Explain your reasoning**.



**8.** Write an equation in the form  for the graph below. **Explain your reasoning**.

