**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**.

