Algebra II Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Quiz Review for Lesson 13.4 & 13.5 Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Hour\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_ 1. Find the period of the graph shown below.



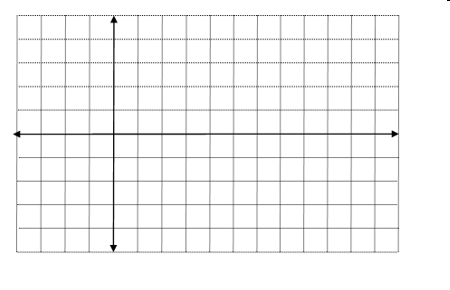
|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| a. | ** | b. | ** | c. | ** | d. | 4** |

2. A particular sound wave can be graphed using the function y = -3sinx.

Find the amplitude and period of the function.

Amplitude:\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_\_\_\_

3. Sketch one cycle of *y* = 4 sin 4. Identify the amplitude and period. List Key Points.

 Amplitude\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_\_

4. Write the equation for the **sine** function shown below.

 Equation:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5**.** Write a **cosine** function for the graph.

Equation:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

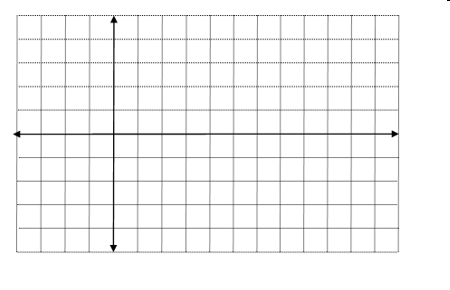
6. Write an equation of the **cosine** function with amplitude 2 and period 4π

Equation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Graph the function in the interval from 0 to 2π.

7. *y* = 4 cos() Give the amplitude and the period. List Key Points.

Amplitude: \_\_\_\_\_\_\_ Period:\_\_\_\_



8. Use the graph of the sine function y = 2sinx shown below.



**a.** How many cycles occur in the graph? \_\_\_\_\_\_\_\_\_\_\_\_\_

**b**. Find the period of the graph. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**c.** Find the amplitude of the graph. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Quiz Review for Lesson 13.4 & 13.5**

**Answer Section**

**MULTIPLE RESPONSE**

1. ANS: B PTS: 1 DIF: L1 REF: 13-4 The Sine Function

OBJ: 13-4.1 Interpreting Sine Functions

NAT: NAEP M1m | CAT5.LV21/22.51 | CAT5.LV21/22.55 | CAT5.LV21/22.56 | IT.LV17/18.AM | IT.LV17/18.CP | S9.TSK3.GM | S9.TSK3.NS | S10.TSK3.GM | S10.TSK3.NS | TV.LV21/22.11 | TV.LV21/22.13 | TV.LV21/22.14 | TV.LVALG.56 STA: MI II.2.3 | MI II.3.5 | MI V.2.4

TOP: 13-4 Example 3 KEY: sine function | period | graphing

MSC: NAEP M1m | CAT5.LV21/22.51 | CAT5.LV21/22.55 | CAT5.LV21/22.56 | IT.LV17/18.AM | IT.LV17/18.CP | S9.TSK3.GM | S9.TSK3.NS | S10.TSK3.GM | S10.TSK3.NS | TV.LV21/22.11 | TV.LV21/22.13 | TV.LV21/22.14 | TV.LVALG.56

**SHORT ANSWER**

2. ANS:

amplitude = 3, period = **

PTS: 1 DIF: L2 REF: 13-4 The Sine Function

OBJ: 13-4.1 Interpreting Sine Functions

NAT: NAEP M1m | CAT5.LV21/22.51 | CAT5.LV21/22.55 | CAT5.LV21/22.56 | IT.LV17/18.AM | IT.LV17/18.CP | S9.TSK3.GM | S9.TSK3.NS | S10.TSK3.GM | S10.TSK3.NS | TV.LV21/22.11 | TV.LV21/22.13 | TV.LV21/22.14 | TV.LVALG.56 STA: MI II.2.3 | MI II.3.5 | MI V.2.4

TOP: 13-4 Example 4

KEY: amplitude | period | sine function | problem solving | word problem

MSC: NAEP M1m | CAT5.LV21/22.51 | CAT5.LV21/22.55 | CAT5.LV21/22.56 | IT.LV17/18.AM | IT.LV17/18.CP | S9.TSK3.GM | S9.TSK3.NS | S10.TSK3.GM | S10.TSK3.NS | TV.LV21/22.11 | TV.LV21/22.13 | TV.LV21/22.14 | TV.LVALG.56

3. ANS:



PTS: 1 DIF: L1 REF: 13-4 The Sine Function

OBJ: 13-4.2 Graphing Sine Functions

NAT: NAEP M1m | CAT5.LV21/22.51 | CAT5.LV21/22.55 | CAT5.LV21/22.56 | IT.LV17/18.AM | IT.LV17/18.CP | S9.TSK3.GM | S9.TSK3.NS | S10.TSK3.GM | S10.TSK3.NS | TV.LV21/22.11 | TV.LV21/22.13 | TV.LV21/22.14 | TV.LVALG.56 STA: MI II.2.3 | MI II.3.5 | MI V.2.4

TOP: 13-4 Example 6 KEY: amplitude | graphing | sine function | period

MSC: NAEP M1m | CAT5.LV21/22.51 | CAT5.LV21/22.55 | CAT5.LV21/22.56 | IT.LV17/18.AM | IT.LV17/18.CP | S9.TSK3.GM | S9.TSK3.NS | S10.TSK3.GM | S10.TSK3.NS | TV.LV21/22.11 | TV.LV21/22.13 | TV.LV21/22.14 | TV.LVALG.56

4. ANS:



PTS: 1 DIF: L1 REF: 13-4 The Sine Function

OBJ: 13-4.2 Graphing Sine Functions

NAT: NAEP M1m | CAT5.LV21/22.51 | CAT5.LV21/22.55 | CAT5.LV21/22.56 | IT.LV17/18.AM | IT.LV17/18.CP | S9.TSK3.GM | S9.TSK3.NS | S10.TSK3.GM | S10.TSK3.NS | TV.LV21/22.11 | TV.LV21/22.13 | TV.LV21/22.14 | TV.LVALG.56 STA: MI II.2.3 | MI II.3.5 | MI V.2.4

TOP: 13-4 Example 7 KEY: amplitude | graphing | period

MSC: NAEP M1m | CAT5.LV21/22.51 | CAT5.LV21/22.55 | CAT5.LV21/22.56 | IT.LV17/18.AM | IT.LV17/18.CP | S9.TSK3.GM | S9.TSK3.NS | S10.TSK3.GM | S10.TSK3.NS | TV.LV21/22.11 | TV.LV21/22.13 | TV.LV21/22.14 | TV.LVALG.56

5. ANS:



PTS: 1 DIF: L1 REF: 13-5 The Cosine Function

OBJ: 13-5.2 Solving Trigonometric Equations

NAT: NAEP M1m | CAT5.LV21/22.51 | CAT5.LV21/22.55 | CAT5.LV21/22.56 | IT.LV17/18.AM | IT.LV17/18.CP | S9.TSK3.GM | S9.TSK3.NS | S10.TSK3.GM | S10.TSK3.NS | TV.LV21/22.11 | TV.LV21/22.13 | TV.LV21/22.14 | TV.LVALG.56 STA: MI II.2.3 | MI II.3.5 | MI V.2.4

TOP: 13-5 Example 3 KEY: amplitude | cosine function | graphing | period

MSC: NAEP M1m | CAT5.LV21/22.51 | CAT5.LV21/22.55 | CAT5.LV21/22.56 | IT.LV17/18.AM | IT.LV17/18.CP | S9.TSK3.GM | S9.TSK3.NS | S10.TSK3.GM | S10.TSK3.NS | TV.LV21/22.11 | TV.LV21/22.13 | TV.LV21/22.14 | TV.LVALG.56

6. ANS:



PTS: 1 DIF: L1 REF: 13-5 The Cosine Function

OBJ: 13-5.2 Solving Trigonometric Equations

NAT: NAEP M1m | CAT5.LV21/22.51 | CAT5.LV21/22.55 | CAT5.LV21/22.56 | IT.LV17/18.AM | IT.LV17/18.CP | S9.TSK3.GM | S9.TSK3.NS | S10.TSK3.GM | S10.TSK3.NS | TV.LV21/22.11 | TV.LV21/22.13 | TV.LV21/22.14 | TV.LVALG.56 STA: MI II.2.3 | MI II.3.5 | MI V.2.4

TOP: 13-5 Example 4 KEY: amplitude | cosine function | period

MSC: NAEP M1m | CAT5.LV21/22.51 | CAT5.LV21/22.55 | CAT5.LV21/22.56 | IT.LV17/18.AM | IT.LV17/18.CP | S9.TSK3.GM | S9.TSK3.NS | S10.TSK3.GM | S10.TSK3.NS | TV.LV21/22.11 | TV.LV21/22.13 | TV.LV21/22.14 | TV.LVALG.56

7. ANS:



PTS: 1 DIF: L1 REF: 13-5 The Cosine Function

OBJ: 13-5.1 Graphing and Writing Cosine Functions

NAT: NAEP M1m | CAT5.LV21/22.51 | CAT5.LV21/22.55 | CAT5.LV21/22.56 | IT.LV17/18.AM | IT.LV17/18.CP | S9.TSK3.GM | S9.TSK3.NS | S10.TSK3.GM | S10.TSK3.NS | TV.LV21/22.11 | TV.LV21/22.13 | TV.LV21/22.14 | TV.LVALG.56 STA: MI II.2.3 | MI II.3.5 | MI V.2.4

TOP: 13-5 Example 2 KEY: amplitude | period | graphing | cosine function

MSC: NAEP M1m | CAT5.LV21/22.51 | CAT5.LV21/22.55 | CAT5.LV21/22.56 | IT.LV17/18.AM | IT.LV17/18.CP | S9.TSK3.GM | S9.TSK3.NS | S10.TSK3.GM | S10.TSK3.NS | TV.LV21/22.11 | TV.LV21/22.13 | TV.LV21/22.14 | TV.LVALG.56

8. ANS:

**a.** 1 cycle

**b.** 2**

**c.** 2

PTS: 1 DIF: L2 REF: 13-4 The Sine Function

OBJ: 13-4.1 Interpreting Sine Functions

NAT: NAEP M1m | CAT5.LV21/22.51 | CAT5.LV21/22.55 | CAT5.LV21/22.56 | IT.LV17/18.AM | IT.LV17/18.CP | S9.TSK3.GM | S9.TSK3.NS | S10.TSK3.GM | S10.TSK3.NS | TV.LV21/22.11 | TV.LV21/22.13 | TV.LV21/22.14 | TV.LVALG.56 STA: MI II.2.3 | MI II.3.5 | MI V.2.4

TOP: 13-4 Example 4 KEY: amplitude | period | sine function | multi-part question

MSC: NAEP M1m | CAT5.LV21/22.51 | CAT5.LV21/22.55 | CAT5.LV21/22.56 | IT.LV17/18.AM | IT.LV17/18.CP | S9.TSK3.GM | S9.TSK3.NS | S10.TSK3.GM | S10.TSK3.NS | TV.LV21/22.11 | TV.LV21/22.13 | TV.LV21/22.14 | TV.LVALG.56