

Homework: Homework assignments come in two types.

- *General Problems:* General problems should give you a sense of your level of knowledge of the material in the section. These questions form the basis for the expected knowledge you will need to demonstrate for quizzes and exams. These assignments are graded based on completeness and are not graded carefully. Solutions to the problems can be found on the textbook webpage (but you do yourself no favors if you all you do is copy the solutions).
- *Write-Up Problems:* Write-up problems are graded on both the mathematical content and the quality of the communication. You should be writing up solutions as if you are helping a classmate to understand the material. You will need to use a combination of diagrams, sentences, and equations to communicate the core ideas of the problem.

Section 5.1 (Circles) Homework:

- 5.1 (General Problems): #1, 3, 5, 7, 9, 11, 13, 15
- 5.1 (Write-Up): #18, 19

Section 5.2 (Angles) Homework:

- 5.2 (General Problems): #3, 5, 7, 9, 11, 15, 19, 23, 25, 29
- 5.2 (Write-ups): #31, 32

Section 5.3 (Points on Circles) Homework:

- 5.3 (General Problems): #1, 5, 7, 9, 11, 13, 17
- 5.3 (Write-Up): #20, #21

Section 5.4 (The Other Trig Functions) Homework:

- 5.4 (General Problems): #1, 5, 9, 11, 15, 19, 23, 27, 31
- 5.4 (Write-Up): #30, 33

Section 5.5 (Right Triangle Trigonometry) Homework:

- 5.5 (General Problems): #1, 3, 5, 9, 11, 15, 19
- 5.5 (Write-Up): #25, 26

Section 6.1 (Sinusoidal Graphs) Homework:

- 6.1 (General Problems): #1, 5, 7, 9, 11 (also graph it), 15 (also graph it), 19
- 6.1 (Write-Up): #21, 24

Section 6.2 (The Other Trig Functions) Homework:

- 6.2 (General Problems): #1, 3, 7, 9, 11, 13, 17, 19, 21, 23
- 6.2 (Write-Up): #27, 28

Section 6.3 (The Inverse Trig Functions) Homework:

- 6.3 (General Problems): #1, 5, 9, 13, 17, 19, 23
- 6.3 (Write-Up): #27, 28

Section 6.4 (Solving Trig Functions) Homework:

- 6.4 (General Problems): #1, 5, 9, 13, 17, 21, 25, 29
- 6.4 (Write-Up): #33 (in degrees), 37 (in radians)

Section 6.5 (Modeling with Trigonometry) Homework:

- 6.5 (General Problems): #1, 3, 7, 9, 11, 15
- 6.5 (Write-Up): #19, 20

Section 7.1 (More Trig Equations) Homework:

- 7.1 (General Problems): #1, 3, 5, 9, 13, 17, 21, 25, 29, 33
- 7.1 (Write-Up): #37, 39

Section 7.2 (The Sum and Difference Identities) Homework:

- 7.2 (General Problems): #1, 5, 9, 17, 21, 27, 29, 45, 49
- 7.2 (Write-Up): #39 (Hint: Write it as a single sinusoidal function), 55

Section 7.3 (The Double Angle Identities) Homework:

- 7.3 (General Problems): #1, 3, 7, 11, 15, 19, 21
- 7.3 (Write-Up): #21, 25

Section 7.4 (Modeling Changing Amplitude and Midline) Homework:

- 7.4 (General Problems): #1 (Plot the points and sketch a potential curve), 3, 5, 7, 9, 11
- 7.4 (Write-Up): #6, 10

Section 8.1 (The Laws of Sines and Cosines) Homework:

- 8.1 (General Problems): #1, 5, 9, 13, 17, 19
- 8.1 (Write-Up): #26 (Hint: $A = \frac{1}{2} \cdot (\text{base}) \cdot (\text{height})$), 39

Section 8.2 (Polar Coordinates) Homework:

- 8.2 (General Problems): #1, 5, 9, 13, 17, 21, 25, 29, 33, 49, 53, 57
- 8.2 (Write-Up): #43-48 (Explain the reasoning you applied to determine the match)