

1.  $[-5.0 \ 3.0 \ -4.0] + [2.0 \ -1.0 \ 1.0]$
2.  $[3.0 \ 0.0 \ -3.0] \times [3.0 \ -4.0 \ -5.0]$
3. normalize  $[0.0 \ 0.0 \ 4.0]$
4.  $[-3.0 \ 0.0 \ 0.0] \cdot [4.0 \ 2.0 \ 1.0]$
5. What is the angle between the following two vectors (in radians)?  $[4.0 \ 1.0 \ 2.0]$ ,  $[4.0 \ 4.0 \ 2.0]$
6.  $[-5.0 \ -2.0 \ 1.0] + [-2.0 \ -3.0 \ 0.0]$
7.  $[-4.0 \ 0.0 \ 1.0] \times [0.0 \ -5.0 \ -2.0]$
8. What is the vector from  $[0.0 \ -1.0 \ -3.0]$  to  $[-5.0 \ -3.0 \ 2.0]$ ?
9.  $[4.0 \ 2.0 \ -1.0] \times [-1.0 \ -3.0 \ 3.0]$
10. What is the relationship between the following two vectors?  $[1.0 \ 4.0 \ 4.0]$ ,  $[-5.0 \ -2.0 \ -5.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
11. normalize  $[2.0 \ -3.0 \ 1.0]$
12. What is the vector from  $[3.0 \ 4.0 \ 1.0]$  to  $[-5.0 \ 0.0 \ -3.0]$ ?
13. normalize  $[-5.0 \ -4.0 \ 0.0]$
14.  $[-1.0 \ -1.0 \ 4.0] + [0.0 \ -1.0 \ -2.0]$
15.  $[3.0 \ 0.0 \ -5.0] \cdot [2.0 \ -1.0 \ 3.0]$
16.  $||[2.0 \ 1.0 \ -3.0]||$
17. What is the relationship between the following two vectors?  $[-1.0 \ 4.0 \ 3.0]$ ,  $[-2.0 \ 2.0 \ 4.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
18.  $[-1.0 \ -3.0 \ 1.0] \cdot [-3.0 \ -5.0 \ 3.0]$
19. What is the vector from  $[4.0 \ 2.0 \ 3.0]$  to  $[-2.0 \ 2.0 \ -1.0]$ ?
20. normalize  $[-5.0 \ -3.0 \ 4.0]$
21.  $[-1.0 \ 1.0 \ 1.0] + [-1.0 \ -3.0 \ -5.0]$
22. What is the angle between the following two vectors (in radians)?  $[4.0 \ -1.0 \ -5.0]$ ,  $[4.0 \ 0.0 \ -3.0]$
23.  $||[0.0 \ -2.0 \ 1.0]||$
24.  $[0.0 \ 0.0 \ 0.0] \cdot [1.0 \ -5.0 \ -4.0]$
25. What is the relationship between the following two vectors?  $[-4.0 \ 3.0 \ 4.0]$ ,  $[-5.0 \ 0.0 \ -2.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
26.  $[-3.0 \ -5.0 \ -5.0] \times [-1.0 \ -3.0 \ 0.0]$

27. normalize  $[-3.0 \ -2.0 \ 4.0]$
28.  $[-4.0 \ 3.0 \ 0.0] + [-3.0 \ -3.0 \ -1.0]$
29. normalize  $[2.0 \ 2.0 \ 3.0]$
30.  $||[0.0 \ -5.0 \ 3.0]||$
31. normalize  $[2.0 \ 3.0 \ -4.0]$
32. normalize  $[1.0 \ 4.0 \ -5.0]$
33. What is the relationship between the following two vectors?  $[2.0 \ -1.0 \ 1.0]$ ,  $[-1.0 \ -5.0 \ -5.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
34.  $||[2.0 \ 4.0 \ 3.0]||$
35. normalize  $[1.0 \ -1.0 \ 0.0]$
36. normalize  $[2.0 \ 0.0 \ 2.0]$
37. What is the relationship between the following two vectors?  $[-5.0 \ 4.0 \ -5.0]$ ,  $[4.0 \ 0.0 \ -5.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
38. What is the angle between the following two vectors (in radians)?  $[1.0 \ 3.0 \ 4.0]$ ,  $[-2.0 \ -2.0 \ -2.0]$
39. What is the vector from  $[4.0 \ -5.0 \ -3.0]$  to  $[3.0 \ 2.0 \ 4.0]$ ?
40.  $[0.0 \ -3.0 \ -1.0] \cdot [-1.0 \ 2.0 \ -4.0]$
41. normalize  $[3.0 \ 3.0 \ -2.0]$
42.  $[0.0 \ 1.0 \ -1.0] + [-4.0 \ 3.0 \ -5.0]$
43. normalize  $[-3.0 \ -1.0 \ 2.0]$
44.  $[-4.0 \ 2.0 \ -2.0] + [1.0 \ -4.0 \ -2.0]$
45.  $[3.0 \ -1.0 \ -2.0] \cdot [-4.0 \ -2.0 \ 3.0]$
46.  $[-3.0 \ 0.0 \ -3.0] \cdot [2.0 \ 0.0 \ 0.0]$
47. normalize  $[-4.0 \ 2.0 \ 0.0]$
48.  $||[-1.0 \ 4.0 \ -3.0]||$
49.  $||[-5.0 \ -1.0 \ 0.0]||$
50. normalize  $[0.0 \ 2.0 \ 3.0]$
51.  $[-4.0 \ 3.0 \ -1.0] \times [4.0 \ -1.0 \ -4.0]$
52. What is the vector from  $[-2.0 \ -4.0 \ 4.0]$  to  $[-3.0 \ 4.0 \ -3.0]$ ?
53.  $[-1.0 \ -1.0 \ 1.0] \cdot [-3.0 \ 4.0 \ -2.0]$

54.  $\| [4.0 \quad -5.0 \quad 3.0] \|$
55. What is the relationship between the following two vectors?  $[-2.0 \quad 0.0 \quad -1.0]$ ,  $[0.0 \quad -3.0 \quad 3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
56. normalize  $[-2.0 \quad -4.0 \quad -4.0]$
57. What is the vector from  $[2.0 \quad -1.0 \quad 4.0]$  to  $[1.0 \quad 3.0 \quad -1.0]$ ?
58.  $\| [-5.0 \quad 2.0 \quad 2.0] \|$
59. What is the angle between the following two vectors (in radians)?  $[-2.0 \quad -5.0 \quad -4.0]$ ,  $[-4.0 \quad 4.0 \quad 0.0]$
60.  $[1.0 \quad -4.0 \quad 3.0] + [4.0 \quad -2.0 \quad -2.0]$
61.  $[0.0 \quad 0.0 \quad -1.0] + [-1.0 \quad 1.0 \quad 1.0]$
62.  $[-4.0 \quad -5.0 \quad 2.0] \times [3.0 \quad -3.0 \quad -4.0]$
63.  $[1.0 \quad 0.0 \quad 3.0] + [3.0 \quad 1.0 \quad 2.0]$
64. What is the vector from  $[1.0 \quad -3.0 \quad -3.0]$  to  $[1.0 \quad 1.0 \quad -1.0]$ ?
65.  $[2.0 \quad -2.0 \quad -1.0] + [-4.0 \quad -3.0 \quad -1.0]$
66. What is the vector from  $[4.0 \quad 4.0 \quad 2.0]$  to  $[-1.0 \quad 4.0 \quad 1.0]$ ?
67.  $[-5.0 \quad 2.0 \quad -2.0] \cdot [-5.0 \quad -4.0 \quad -1.0]$
68. What is the angle between the following two vectors (in radians)?  $[1.0 \quad 3.0 \quad -5.0]$ ,  $[0.0 \quad -3.0 \quad -1.0]$
69.  $\| [-4.0 \quad -5.0 \quad -1.0] \|$
70. What is the vector from  $[-2.0 \quad 4.0 \quad -3.0]$  to  $[-1.0 \quad 0.0 \quad -2.0]$ ?
71. What is the angle between the following two vectors (in radians)?  $[-4.0 \quad -2.0 \quad -3.0]$ ,  $[-5.0 \quad -1.0 \quad 4.0]$
72. What is the vector from  $[-2.0 \quad 3.0 \quad 3.0]$  to  $[3.0 \quad -5.0 \quad 0.0]$ ?
73.  $[-1.0 \quad 2.0 \quad -2.0] \cdot [-3.0 \quad 4.0 \quad 3.0]$
74. What is the angle between the following two vectors (in radians)?  $[2.0 \quad 1.0 \quad -1.0]$ ,  $[-3.0 \quad -1.0 \quad 0.0]$
75.  $[0.0 \quad 3.0 \quad -1.0] + [4.0 \quad 1.0 \quad 2.0]$
76.  $[1.0 \quad -2.0 \quad -3.0] + [1.0 \quad 2.0 \quad 1.0]$
77. normalize  $[-1.0 \quad 1.0 \quad 0.0]$
78. What is the vector from  $[1.0 \quad 1.0 \quad 1.0]$  to  $[-2.0 \quad 2.0 \quad 1.0]$ ?
79. What is the relationship between the following two vectors?  $[3.0 \quad 1.0 \quad 3.0]$ ,  $[-5.0 \quad 2.0 \quad -4.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular

80. What is the angle between the following two vectors (in radians)?  $[4.0 \ -3.0 \ -4.0]$ ,  $[0.0 \ -5.0 \ 4.0]$
81.  $||[3.0 \ -5.0 \ -5.0]||$
82. What is the vector from  $[-1.0 \ 3.0 \ 1.0]$  to  $[-3.0 \ 4.0 \ -3.0]$ ?
83.  $[-3.0 \ 4.0 \ 1.0] + [-1.0 \ -3.0 \ -4.0]$
84.  $[-4.0 \ -3.0 \ -2.0] \cdot [-4.0 \ 1.0 \ 2.0]$
85. What is the relationship between the following two vectors?  $[1.0 \ -5.0 \ -2.0]$ ,  $[-1.0 \ -5.0 \ -3.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
86. What is the relationship between the following two vectors?  $[-1.0 \ -5.0 \ -2.0]$ ,  $[1.0 \ 0.0 \ 4.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
87.  $[-4.0 \ 1.0 \ -5.0] + [0.0 \ 1.0 \ -1.0]$
88. What is the angle between the following two vectors (in radians)?  $[-5.0 \ 4.0 \ -4.0]$ ,  $[-2.0 \ -3.0 \ -5.0]$
89. What is the relationship between the following two vectors?  $[-1.0 \ 2.0 \ 3.0]$ ,  $[3.0 \ 0.0 \ 4.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
90. What is the relationship between the following two vectors?  $[0.0 \ -3.0 \ 1.0]$ ,  $[-5.0 \ -2.0 \ 3.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
91. What is the angle between the following two vectors (in radians)?  $[-5.0 \ 3.0 \ 3.0]$ ,  $[0.0 \ 3.0 \ 4.0]$
92.  $[4.0 \ -4.0 \ 2.0] \cdot [2.0 \ 3.0 \ 4.0]$
93. What is the vector from  $[-2.0 \ -1.0 \ -5.0]$  to  $[-4.0 \ -5.0 \ 1.0]$ ?
94. What is the vector from  $[-5.0 \ 1.0 \ 2.0]$  to  $[-2.0 \ 2.0 \ 1.0]$ ?
95.  $[-1.0 \ 2.0 \ 2.0] \times [3.0 \ 0.0 \ 1.0]$
96.  $[0.0 \ 1.0 \ 2.0] + [1.0 \ 2.0 \ 3.0]$
97.  $[-1.0 \ 0.0 \ -1.0] \cdot [2.0 \ -2.0 \ -3.0]$
98. What is the relationship between the following two vectors?  $[2.0 \ -1.0 \ -1.0]$ ,  $[3.0 \ -5.0 \ 1.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
99.  $[2.0 \ -3.0 \ -3.0] \times [-1.0 \ 1.0 \ -3.0]$
100.  $||[3.0 \ 2.0 \ 1.0]||$
101.  $[4.0 \ 1.0 \ 3.0] + [2.0 \ -3.0 \ -1.0]$
102. What is the vector from  $[-3.0 \ 1.0 \ 1.0]$  to  $[-2.0 \ -3.0 \ 2.0]$ ?

103.  $[4.0 \ 1.0 \ -5.0] \times [-2.0 \ -1.0 \ 4.0]$
104. What is the vector from  $[-3.0 \ 1.0 \ -5.0]$  to  $[-3.0 \ 2.0 \ -3.0]$ ?
105.  $[-5.0 \ -3.0 \ -3.0] + [-3.0 \ -1.0 \ 0.0]$
106.  $[4.0 \ -3.0 \ 0.0] \cdot [4.0 \ 0.0 \ -4.0]$
107.  $[1.0 \ -3.0 \ 2.0] \times [-4.0 \ -4.0 \ 2.0]$
108.  $[-3.0 \ -2.0 \ -4.0] \cdot [1.0 \ -5.0 \ 2.0]$
109. normalize  $[1.0 \ 3.0 \ -1.0]$
110.  $[0.0 \ -4.0 \ -5.0] + [-4.0 \ -1.0 \ 0.0]$
111.  $[2.0 \ 1.0 \ -3.0] \times [3.0 \ -5.0 \ -2.0]$
112.  $\|[-3.0 \ 2.0 \ -5.0]\|$
113. normalize  $[0.0 \ 0.0 \ 1.0]$
114. What is the vector from  $[-4.0 \ 2.0 \ -5.0]$  to  $[-3.0 \ 0.0 \ -1.0]$ ?
115. What is the relationship between the following two vectors?  $[-5.0 \ -2.0 \ -2.0]$ ,  $[-2.0 \ -5.0 \ -3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
116.  $[-5.0 \ 1.0 \ 4.0] \cdot [-2.0 \ 1.0 \ 0.0]$
117. normalize  $[-4.0 \ -3.0 \ 3.0]$
118. normalize  $[-5.0 \ 2.0 \ 0.0]$
119. What is the angle between the following two vectors (in radians)?  $[4.0 \ -5.0 \ 3.0]$ ,  $[3.0 \ -4.0 \ 3.0]$
120. What is the vector from  $[4.0 \ 2.0 \ 4.0]$  to  $[-1.0 \ -2.0 \ 2.0]$ ?
121. normalize  $[3.0 \ 4.0 \ 2.0]$
122.  $[1.0 \ -1.0 \ 4.0] \times [-5.0 \ 0.0 \ 0.0]$
123. What is the angle between the following two vectors (in radians)?  $[-2.0 \ 3.0 \ -5.0]$ ,  $[0.0 \ -4.0 \ -2.0]$
124. normalize  $[2.0 \ -1.0 \ 1.0]$
125.  $[4.0 \ 1.0 \ 3.0] \cdot [4.0 \ -4.0 \ 3.0]$
126. What is the relationship between the following two vectors?  $[-3.0 \ 1.0 \ 4.0]$ ,  $[3.0 \ 1.0 \ -1.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
127.  $[-5.0 \ -2.0 \ 4.0] \times [2.0 \ -1.0 \ 3.0]$
128. normalize  $[-2.0 \ -2.0 \ -3.0]$
129.  $[-1.0 \ 0.0 \ 2.0] + [0.0 \ -5.0 \ -4.0]$

130. What is the relationship between the following two vectors?  $[-4.0 \ -1.0 \ 1.0]$ ,  $[-2.0 \ 1.0 \ 0.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
131.  $[1.0 \ 4.0 \ -5.0] + [-1.0 \ 2.0 \ 2.0]$
132. normalize  $[-4.0 \ 2.0 \ 4.0]$
133. normalize  $[-3.0 \ -4.0 \ -1.0]$
134. normalize  $[-3.0 \ -5.0 \ -5.0]$
135.  $[2.0 \ 3.0 \ 3.0] \times [-4.0 \ 2.0 \ -3.0]$
136.  $[-1.0 \ 3.0 \ -3.0] + [1.0 \ -4.0 \ -1.0]$
137.  $[-3.0 \ 2.0 \ -2.0] + [-5.0 \ -1.0 \ 4.0]$
138.  $\|[2.0 \ -2.0 \ 0.0]\|$
139. What is the relationship between the following two vectors?  $[-2.0 \ 1.0 \ 2.0]$ ,  $[-1.0 \ -3.0 \ -2.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
140. What is the relationship between the following two vectors?  $[-4.0 \ -5.0 \ 4.0]$ ,  $[-4.0 \ 1.0 \ 1.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
141.  $[4.0 \ 3.0 \ 0.0] + [3.0 \ -3.0 \ 2.0]$
142.  $\|[0.0 \ -2.0 \ -2.0]\|$
143.  $\|[-3.0 \ -1.0 \ -5.0]\|$
144.  $[-4.0 \ 4.0 \ 3.0] + [-5.0 \ 3.0 \ -4.0]$
145.  $[2.0 \ -1.0 \ -2.0] \times [-5.0 \ -3.0 \ -4.0]$
146.  $[-4.0 \ 4.0 \ 3.0] \cdot [-1.0 \ 1.0 \ 1.0]$
147.  $[-5.0 \ 0.0 \ -5.0] \times [-2.0 \ -1.0 \ -2.0]$
148. What is the relationship between the following two vectors?  $[1.0 \ 3.0 \ 3.0]$ ,  $[-1.0 \ -1.0 \ 4.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
149.  $[3.0 \ -5.0 \ -1.0] \cdot [2.0 \ 4.0 \ 4.0]$
150.  $[-2.0 \ 0.0 \ -2.0] + [2.0 \ -2.0 \ -1.0]$
151.  $[-1.0 \ 4.0 \ -1.0] \times [1.0 \ -5.0 \ -3.0]$
152. What is the relationship between the following two vectors?  $[4.0 \ -5.0 \ -3.0]$ ,  $[2.0 \ -5.0 \ 1.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular

153. What is the vector from  $[2.0 \ -1.0 \ 0.0]$  to  $[1.0 \ 3.0 \ -1.0]$ ?
154. normalize  $[2.0 \ -4.0 \ 1.0]$
155. What is the relationship between the following two vectors?  $[-2.0 \ 0.0 \ -5.0]$ ,  $[-5.0 \ -4.0 \ 4.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
156. What is the relationship between the following two vectors?  $[-3.0 \ 0.0 \ 2.0]$ ,  $[-5.0 \ 0.0 \ -5.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
157. What is the angle between the following two vectors (in radians)?  $[-5.0 \ 4.0 \ 2.0]$ ,  $[1.0 \ -5.0 \ 1.0]$
158.  $[0.0 \ 3.0 \ 4.0] + [-1.0 \ 3.0 \ -5.0]$
159. normalize  $[-5.0 \ -3.0 \ 0.0]$
160.  $[-4.0 \ 0.0 \ 3.0] \times [-2.0 \ -1.0 \ -2.0]$
161. What is the vector from  $[4.0 \ 4.0 \ 1.0]$  to  $[3.0 \ -5.0 \ -1.0]$ ?
162. What is the vector from  $[4.0 \ 3.0 \ -5.0]$  to  $[0.0 \ 4.0 \ 0.0]$ ?
163.  $[-3.0 \ -1.0 \ 2.0] + [4.0 \ 1.0 \ 4.0]$
164. What is the angle between the following two vectors (in radians)?  $[0.0 \ -3.0 \ -2.0]$ ,  $[-2.0 \ 3.0 \ 4.0]$
165. What is the vector from  $[4.0 \ -4.0 \ -5.0]$  to  $[-1.0 \ 4.0 \ 1.0]$ ?
166.  $||[-4.0 \ -5.0 \ -4.0]||$
167. normalize  $[-5.0 \ -1.0 \ 1.0]$
168. normalize  $[3.0 \ 0.0 \ 4.0]$
169.  $[3.0 \ 3.0 \ 2.0] \times [2.0 \ -2.0 \ 1.0]$
170. What is the relationship between the following two vectors?  $[1.0 \ 2.0 \ 3.0]$ ,  $[-2.0 \ 0.0 \ 3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
171. What is the relationship between the following two vectors?  $[2.0 \ -1.0 \ 3.0]$ ,  $[4.0 \ 3.0 \ -3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
172.  $||[-5.0 \ 1.0 \ 1.0]||$
173.  $[-1.0 \ 1.0 \ -3.0] \cdot [-2.0 \ 3.0 \ 4.0]$
174.  $||[1.0 \ -4.0 \ -5.0]||$
175.  $[0.0 \ -1.0 \ -5.0] + [4.0 \ -4.0 \ 2.0]$
176. What is the angle between the following two vectors (in radians)?  $[4.0 \ -2.0 \ 3.0]$ ,  $[4.0 \ 4.0 \ -4.0]$

177. What is the vector from  $[1.0 \ -5.0 \ 3.0]$  to  $[-3.0 \ -1.0 \ -5.0]$ ?
178. What is the angle between the following two vectors (in radians)?  $[-2.0 \ 3.0 \ 1.0]$ ,  $[0.0 \ 2.0 \ -2.0]$
179.  $[2.0 \ 3.0 \ -2.0] \times [3.0 \ -5.0 \ -4.0]$
180.  $[4.0 \ 4.0 \ 4.0] \cdot [-5.0 \ 0.0 \ 0.0]$
181. What is the relationship between the following two vectors?  $[1.0 \ -4.0 \ 2.0]$ ,  $[1.0 \ 4.0 \ -5.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
182. normalize  $[4.0 \ -1.0 \ 2.0]$
183. What is the vector from  $[-1.0 \ 2.0 \ -5.0]$  to  $[4.0 \ -2.0 \ -4.0]$ ?
184. What is the angle between the following two vectors (in radians)?  $[1.0 \ -2.0 \ -4.0]$ ,  $[-3.0 \ -5.0 \ -1.0]$
185.  $[-4.0 \ -3.0 \ 0.0] \times [-5.0 \ 4.0 \ 2.0]$
186.  $[-4.0 \ 1.0 \ -1.0] \times [0.0 \ -4.0 \ -5.0]$
187.  $[2.0 \ 4.0 \ 0.0] \times [-4.0 \ -1.0 \ 0.0]$
188.  $[4.0 \ 2.0 \ 2.0] \times [-2.0 \ -1.0 \ -4.0]$
189.  $[-3.0 \ 4.0 \ 4.0] \times [-2.0 \ 0.0 \ -1.0]$
190. normalize  $[3.0 \ 1.0 \ -4.0]$
191. What is the vector from  $[1.0 \ -2.0 \ 3.0]$  to  $[-2.0 \ -3.0 \ 2.0]$ ?
192.  $[-2.0 \ 1.0 \ -3.0] + [2.0 \ -3.0 \ 3.0]$
193.  $[-3.0 \ -3.0 \ -2.0] \cdot [-1.0 \ -5.0 \ 2.0]$
194.  $[2.0 \ -1.0 \ -3.0] + [-3.0 \ 0.0 \ 4.0]$
195. What is the relationship between the following two vectors?  $[-1.0 \ 4.0 \ -5.0]$ ,  $[2.0 \ -1.0 \ 4.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
196.  $[-1.0 \ 0.0 \ -3.0] \times [1.0 \ -3.0 \ -3.0]$
197. What is the vector from  $[-5.0 \ 2.0 \ -4.0]$  to  $[-2.0 \ 0.0 \ -1.0]$ ?
198. What is the relationship between the following two vectors?  $[2.0 \ -1.0 \ -3.0]$ ,  $[-3.0 \ 1.0 \ 2.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
199. What is the angle between the following two vectors (in radians)?  $[3.0 \ 0.0 \ -5.0]$ ,  $[-2.0 \ -3.0 \ -5.0]$
200.  $[0.0 \ -3.0 \ 2.0] + [4.0 \ -4.0 \ 1.0]$
201. What is the vector from  $[-3.0 \ 2.0 \ 4.0]$  to  $[-1.0 \ -5.0 \ -1.0]$ ?
202.  $||[3.0 \ -4.0 \ 3.0]||$



203.  $\|[-5.0 \ 4.0 \ 4.0]\|$
204.  $[-4.0 \ 0.0 \ -2.0] \cdot [-1.0 \ 0.0 \ 0.0]$
205.  $[3.0 \ 1.0 \ 1.0] \cdot [4.0 \ 4.0 \ 0.0]$
206. normalize  $[-2.0 \ 2.0 \ -3.0]$
207. What is the vector from  $[-2.0 \ 4.0 \ -1.0]$  to  $[4.0 \ 0.0 \ -1.0]$ ?
208.  $[-1.0 \ 0.0 \ 0.0] \times [-3.0 \ -4.0 \ 2.0]$
209.  $[2.0 \ 2.0 \ 2.0] \times [-5.0 \ -5.0 \ 1.0]$
210.  $[4.0 \ 0.0 \ -4.0] + [-4.0 \ -2.0 \ 1.0]$
211.  $[2.0 \ 1.0 \ 3.0] \cdot [-5.0 \ 0.0 \ -5.0]$
212. What is the relationship between the following two vectors?  $[-2.0 \ 0.0 \ 3.0]$ ,  $[-5.0 \ -1.0 \ 3.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
213. What is the vector from  $[-1.0 \ -2.0 \ 2.0]$  to  $[1.0 \ -4.0 \ -1.0]$ ?
214.  $[-3.0 \ 4.0 \ 4.0] + [-3.0 \ -3.0 \ 1.0]$
215. What is the angle between the following two vectors (in radians)?  $[0.0 \ -5.0 \ -4.0]$ ,  $[0.0 \ 0.0 \ 3.0]$
216. normalize  $[-1.0 \ 0.0 \ -1.0]$
217. What is the relationship between the following two vectors?  $[-4.0 \ 2.0 \ 4.0]$ ,  $[2.0 \ 1.0 \ 1.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
218.  $[-1.0 \ -4.0 \ -2.0] \times [-5.0 \ -5.0 \ 0.0]$
219.  $[2.0 \ -4.0 \ -4.0] \cdot [0.0 \ -4.0 \ 1.0]$
220. What is the relationship between the following two vectors?  $[-3.0 \ 4.0 \ 3.0]$ ,  $[4.0 \ 0.0 \ -5.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
221.  $[4.0 \ -3.0 \ -2.0] \times [1.0 \ 1.0 \ -2.0]$
222.  $[-3.0 \ 1.0 \ 2.0] \times [1.0 \ -3.0 \ -4.0]$
223. What is the relationship between the following two vectors?  $[-2.0 \ -1.0 \ -4.0]$ ,  $[2.0 \ 1.0 \ -3.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
224.  $[0.0 \ -4.0 \ -3.0] \times [-3.0 \ 0.0 \ 4.0]$
225. normalize  $[4.0 \ -1.0 \ 0.0]$
226. What is the relationship between the following two vectors?  $[-1.0 \ 4.0 \ 3.0]$ ,  $[-5.0 \ -4.0 \ 4.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular

227. What is the vector from  $[-1.0 \ 1.0 \ 2.0]$  to  $[3.0 \ 2.0 \ -3.0]$ ?
228.  $[-5.0 \ 3.0 \ -2.0] + [1.0 \ 3.0 \ -4.0]$
229. normalize  $[4.0 \ 0.0 \ 2.0]$
230.  $||[-3.0 \ -4.0 \ -3.0]||$
231. What is the angle between the following two vectors (in radians)?  $[4.0 \ -5.0 \ 4.0]$ ,  $[-2.0 \ 2.0 \ -1.0]$
232. What is the angle between the following two vectors (in radians)?  $[1.0 \ 4.0 \ 2.0]$ ,  $[3.0 \ -1.0 \ -4.0]$
233.  $||[-2.0 \ 1.0 \ 0.0]||$
234.  $[0.0 \ 3.0 \ 0.0] + [-5.0 \ -2.0 \ 1.0]$
235.  $[3.0 \ -4.0 \ -1.0] \cdot [3.0 \ 0.0 \ -4.0]$
236. What is the vector from  $[0.0 \ 3.0 \ -5.0]$  to  $[-3.0 \ -2.0 \ 3.0]$ ?
237.  $[0.0 \ -4.0 \ -5.0] \cdot [2.0 \ -4.0 \ -1.0]$
238.  $||[1.0 \ 0.0 \ -4.0]||$
239. normalize  $[-1.0 \ -2.0 \ 1.0]$
240. normalize  $[-5.0 \ -3.0 \ 3.0]$
241. What is the angle between the following two vectors (in radians)?  $[0.0 \ -4.0 \ -3.0]$ ,  $[-2.0 \ -5.0 \ -3.0]$
242. normalize  $[0.0 \ -3.0 \ 1.0]$
243.  $[4.0 \ 3.0 \ -4.0] + [-4.0 \ -1.0 \ 2.0]$
244. normalize  $[3.0 \ -5.0 \ -1.0]$
245. What is the angle between the following two vectors (in radians)?  $[0.0 \ 3.0 \ 2.0]$ ,  $[-2.0 \ 1.0 \ -2.0]$
246. normalize  $[1.0 \ 3.0 \ 3.0]$
247. What is the relationship between the following two vectors?  $[2.0 \ 2.0 \ 2.0]$ ,  $[-5.0 \ -1.0 \ -2.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
248. What is the angle between the following two vectors (in radians)?  $[-5.0 \ 1.0 \ 4.0]$ ,  $[-2.0 \ 0.0 \ -1.0]$
249. What is the vector from  $[-1.0 \ -2.0 \ 1.0]$  to  $[-4.0 \ -5.0 \ 1.0]$ ?
250.  $[0.0 \ 0.0 \ 4.0] \cdot [-3.0 \ -3.0 \ 3.0]$
251. What is the vector from  $[-5.0 \ 4.0 \ -2.0]$  to  $[-3.0 \ -3.0 \ -2.0]$ ?
252.  $[-2.0 \ 3.0 \ 1.0] \times [4.0 \ 3.0 \ 0.0]$
253. What is the angle between the following two vectors (in radians)?  $[0.0 \ -4.0 \ 3.0]$ ,  $[3.0 \ -4.0 \ 0.0]$
254. normalize  $[4.0 \ 0.0 \ -4.0]$

255.  $||[-1.0 \ -3.0 \ 1.0]||$
256.  $[4.0 \ 1.0 \ -2.0] \cdot [-1.0 \ 0.0 \ -4.0]$
257. What is the relationship between the following two vectors?  $[-2.0 \ -3.0 \ 4.0]$ ,  $[-3.0 \ -1.0 \ 3.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
258.  $[0.0 \ -2.0 \ 1.0] \cdot [1.0 \ 3.0 \ 4.0]$
259. normalize  $[3.0 \ -4.0 \ 3.0]$
260.  $[-4.0 \ -1.0 \ 2.0] \cdot [-5.0 \ -4.0 \ -4.0]$
261.  $[-4.0 \ -1.0 \ 4.0] + [0.0 \ 2.0 \ 0.0]$
262.  $[-1.0 \ 1.0 \ 3.0] \times [-5.0 \ 0.0 \ -3.0]$
263.  $[0.0 \ 1.0 \ -2.0] \cdot [2.0 \ -3.0 \ -4.0]$
264. normalize  $[-5.0 \ 0.0 \ 0.0]$
265.  $[-3.0 \ -3.0 \ 0.0] \cdot [2.0 \ 4.0 \ 2.0]$
266.  $[-4.0 \ -1.0 \ 1.0] + [3.0 \ -2.0 \ -4.0]$
267.  $[-3.0 \ 4.0 \ 3.0] \times [-1.0 \ 2.0 \ -2.0]$
268. normalize  $[-5.0 \ -4.0 \ 0.0]$
269.  $[4.0 \ 4.0 \ -2.0] + [-1.0 \ -5.0 \ -4.0]$
270.  $||[1.0 \ -5.0 \ -4.0]||$
271.  $||[4.0 \ -4.0 \ -4.0]||$
272.  $[0.0 \ -3.0 \ -2.0] + [0.0 \ -1.0 \ 0.0]$
273. What is the angle between the following two vectors (in radians)?  $[3.0 \ -5.0 \ -1.0]$ ,  $[3.0 \ 1.0 \ 4.0]$
274. normalize  $[3.0 \ 0.0 \ -2.0]$
275. normalize  $[-4.0 \ -3.0 \ 1.0]$
276.  $[-1.0 \ -3.0 \ 0.0] + [4.0 \ 0.0 \ -5.0]$
277. What is the relationship between the following two vectors?  $[-2.0 \ -1.0 \ 3.0]$ ,  $[-4.0 \ 0.0 \ 2.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
278.  $[-4.0 \ 4.0 \ 1.0] + [-2.0 \ -1.0 \ 0.0]$
279. What is the relationship between the following two vectors?  $[-1.0 \ -4.0 \ 3.0]$ ,  $[2.0 \ -4.0 \ -4.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
280.  $[-5.0 \ 0.0 \ -3.0] + [-4.0 \ -4.0 \ -3.0]$

281.  $[0.0 \ -1.0 \ -2.0] \cdot [-1.0 \ -5.0 \ 2.0]$
282. What is the vector from  $[4.0 \ 0.0 \ -3.0]$  to  $[4.0 \ -3.0 \ -4.0]$ ?
283. What is the angle between the following two vectors (in radians)?  $[1.0 \ -4.0 \ -2.0]$ ,  $[0.0 \ -4.0 \ -2.0]$
284.  $[-5.0 \ -4.0 \ -2.0] \cdot [1.0 \ -2.0 \ 4.0]$
285.  $[-2.0 \ 1.0 \ -1.0] \times [1.0 \ 1.0 \ -1.0]$
286. What is the relationship between the following two vectors?  $[0.0 \ 1.0 \ 4.0]$ ,  $[3.0 \ 4.0 \ -3.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
287.  $[-2.0 \ 0.0 \ -1.0] \cdot [3.0 \ -3.0 \ -4.0]$
288. What is the vector from  $[-4.0 \ 2.0 \ 0.0]$  to  $[-1.0 \ -3.0 \ 2.0]$ ?
289.  $[-5.0 \ 0.0 \ -3.0] + [-1.0 \ 0.0 \ 0.0]$
290.  $||[-5.0 \ 3.0 \ -4.0]||$
291. normalize  $[0.0 \ -3.0 \ -1.0]$
292. What is the angle between the following two vectors (in radians)?  $[3.0 \ -4.0 \ -3.0]$ ,  $[-3.0 \ -4.0 \ 0.0]$
293.  $[1.0 \ 3.0 \ 4.0] \times [0.0 \ -5.0 \ -2.0]$
294. What is the relationship between the following two vectors?  $[3.0 \ -4.0 \ -2.0]$ ,  $[-2.0 \ -4.0 \ -3.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
295.  $||[-1.0 \ 3.0 \ -2.0]||$
296. normalize  $[-4.0 \ 4.0 \ -2.0]$
297.  $||[-4.0 \ 4.0 \ -3.0]||$
298.  $||[0.0 \ 0.0 \ 0.0]||$
299. What is the vector from  $[4.0 \ -3.0 \ 3.0]$  to  $[-5.0 \ 1.0 \ 3.0]$ ?
300.  $[-2.0 \ -1.0 \ 3.0] + [0.0 \ 1.0 \ -4.0]$
301. normalize  $[-4.0 \ -3.0 \ -5.0]$
302. What is the relationship between the following two vectors?  $[-1.0 \ 1.0 \ -4.0]$ ,  $[-3.0 \ 2.0 \ 2.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
303.  $[-3.0 \ 4.0 \ 3.0] \times [-5.0 \ -4.0 \ 3.0]$
304. What is the vector from  $[0.0 \ -4.0 \ 3.0]$  to  $[2.0 \ -4.0 \ -1.0]$ ?
305.  $[-2.0 \ 0.0 \ -4.0] \times [-5.0 \ 2.0 \ 2.0]$
306. normalize  $[1.0 \ 0.0 \ 0.0]$

307.  $||[-1.0 \ -3.0 \ 2.0]||$
308. normalize  $[-5.0 \ -3.0 \ -1.0]$
309. What is the relationship between the following two vectors?  $[-2.0 \ -5.0 \ -4.0]$ ,  $[4.0 \ 1.0 \ -3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
310. normalize  $[3.0 \ -2.0 \ 3.0]$
311.  $[-1.0 \ 3.0 \ 4.0] + [1.0 \ 3.0 \ 3.0]$
312.  $[3.0 \ 4.0 \ -1.0] \times [-4.0 \ 3.0 \ 3.0]$
313. What is the angle between the following two vectors (in radians)?  $[-4.0 \ -5.0 \ 2.0]$ ,  $[-5.0 \ -3.0 \ -5.0]$
314.  $||[-3.0 \ -3.0 \ -4.0]||$
315. What is the relationship between the following two vectors?  $[-3.0 \ 4.0 \ 2.0]$ ,  $[4.0 \ -2.0 \ 0.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
316. normalize  $[1.0 \ 3.0 \ 2.0]$
317.  $[-2.0 \ -2.0 \ 3.0] \times [-3.0 \ 1.0 \ 3.0]$
318.  $[-2.0 \ 1.0 \ -2.0] \times [0.0 \ -5.0 \ 3.0]$
319.  $[3.0 \ -4.0 \ -1.0] \cdot [-1.0 \ 3.0 \ -1.0]$
320. What is the relationship between the following two vectors?  $[-1.0 \ 4.0 \ 1.0]$ ,  $[-1.0 \ -1.0 \ 3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
321.  $[-5.0 \ 3.0 \ 4.0] \cdot [3.0 \ -3.0 \ 0.0]$
322. normalize  $[3.0 \ 3.0 \ -2.0]$
323.  $[-5.0 \ -4.0 \ -3.0] \cdot [0.0 \ 0.0 \ 0.0]$
324. What is the vector from  $[-5.0 \ -4.0 \ -2.0]$  to  $[-4.0 \ 3.0 \ 0.0]$ ?
325. What is the relationship between the following two vectors?  $[0.0 \ 2.0 \ 4.0]$ ,  $[-5.0 \ 0.0 \ -2.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
326. What is the relationship between the following two vectors?  $[3.0 \ 4.0 \ 0.0]$ ,  $[1.0 \ -3.0 \ 3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
327. What is the vector from  $[-1.0 \ 0.0 \ -1.0]$  to  $[-5.0 \ 3.0 \ 4.0]$ ?
328.  $[-5.0 \ 4.0 \ -3.0] + [1.0 \ -1.0 \ 2.0]$
329. What is the vector from  $[2.0 \ -3.0 \ 4.0]$  to  $[-1.0 \ -5.0 \ 2.0]$ ?

330. normalize  $[0.0 \ 0.0 \ -1.0]$
331.  $[-4.0 \ 3.0 \ -2.0] + [-1.0 \ -1.0 \ -5.0]$
332. normalize  $[0.0 \ -5.0 \ -5.0]$
333. What is the vector from  $[-2.0 \ 1.0 \ 1.0]$  to  $[2.0 \ 2.0 \ -3.0]$ ?
334. What is the relationship between the following two vectors?  $[-2.0 \ 0.0 \ 1.0]$ ,  $[1.0 \ 1.0 \ -4.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
335. normalize  $[-3.0 \ -2.0 \ -4.0]$
336. What is the vector from  $[3.0 \ -2.0 \ -2.0]$  to  $[-3.0 \ -2.0 \ -1.0]$ ?
337. What is the angle between the following two vectors (in radians)?  $[-1.0 \ -2.0 \ -4.0]$ ,  $[2.0 \ 0.0 \ 0.0]$
338. What is the relationship between the following two vectors?  $[2.0 \ -1.0 \ -5.0]$ ,  $[0.0 \ 4.0 \ 3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
339.  $[-3.0 \ -4.0 \ 3.0] \cdot [-5.0 \ -4.0 \ 1.0]$
340. What is the angle between the following two vectors (in radians)?  $[1.0 \ -4.0 \ 2.0]$ ,  $[3.0 \ -5.0 \ -4.0]$
341.  $[-4.0 \ 3.0 \ 1.0] \cdot [1.0 \ 2.0 \ -5.0]$
342. normalize  $[0.0 \ 4.0 \ -4.0]$
343. What is the vector from  $[-3.0 \ 0.0 \ -1.0]$  to  $[-5.0 \ -4.0 \ -4.0]$ ?
344. What is the angle between the following two vectors (in radians)?  $[3.0 \ 1.0 \ -4.0]$ ,  $[4.0 \ -3.0 \ 3.0]$
345.  $[-1.0 \ -4.0 \ -3.0] + [-5.0 \ 0.0 \ 1.0]$
346.  $[0.0 \ -5.0 \ 3.0] \cdot [-5.0 \ 2.0 \ -4.0]$
347.  $[-1.0 \ -3.0 \ -5.0] + [2.0 \ 0.0 \ -1.0]$
348.  $[-3.0 \ -2.0 \ 4.0] \cdot [-4.0 \ 0.0 \ -4.0]$
349. What is the relationship between the following two vectors?  $[2.0 \ 4.0 \ -1.0]$ ,  $[-2.0 \ 2.0 \ 1.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
350. What is the angle between the following two vectors (in radians)?  $[0.0 \ 0.0 \ -1.0]$ ,  $[-2.0 \ 3.0 \ -5.0]$
351. What is the relationship between the following two vectors?  $[-3.0 \ 1.0 \ 0.0]$ ,  $[-4.0 \ 1.0 \ 1.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
352.  $[-5.0 \ -2.0 \ -2.0] \times [-5.0 \ -5.0 \ -4.0]$
353. normalize  $[0.0 \ 0.0 \ 2.0]$

354.  $[-5.0 \ -5.0 \ -2.0] \times [-1.0 \ -4.0 \ -2.0]$
355. What is the angle between the following two vectors (in radians)?  $[3.0 \ -5.0 \ 1.0]$ ,  $[1.0 \ -2.0 \ 4.0]$
356. normalize  $[1.0 \ 3.0 \ 1.0]$
357. What is the vector from  $[-1.0 \ -5.0 \ -2.0]$  to  $[-4.0 \ -5.0 \ 4.0]$ ?
358. What is the relationship between the following two vectors?  $[-2.0 \ 3.0 \ -5.0]$ ,  $[-4.0 \ 0.0 \ -3.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
359. What is the angle between the following two vectors (in radians)?  $[-3.0 \ 1.0 \ -1.0]$ ,  $[0.0 \ 4.0 \ -2.0]$
360.  $[1.0 \ 0.0 \ -3.0] + [3.0 \ 2.0 \ 1.0]$
361.  $[-5.0 \ 0.0 \ -1.0] + [-2.0 \ 1.0 \ -1.0]$
362.  $||[-4.0 \ 1.0 \ -3.0]||$
363. normalize  $[0.0 \ -3.0 \ -1.0]$
364.  $[-1.0 \ -2.0 \ 1.0] + [-2.0 \ -3.0 \ 0.0]$
365.  $[3.0 \ 0.0 \ -4.0] \cdot [0.0 \ -4.0 \ -1.0]$
366. normalize  $[-1.0 \ -1.0 \ 3.0]$
367.  $[-4.0 \ 1.0 \ 2.0] \cdot [0.0 \ 1.0 \ 2.0]$
368. What is the angle between the following two vectors (in radians)?  $[4.0 \ -2.0 \ -3.0]$ ,  $[-5.0 \ -2.0 \ 0.0]$
369.  $[1.0 \ 0.0 \ -4.0] + [2.0 \ -5.0 \ 3.0]$
370. What is the vector from  $[-2.0 \ 0.0 \ -5.0]$  to  $[0.0 \ 4.0 \ 2.0]$ ?
371. normalize  $[4.0 \ -3.0 \ 2.0]$
372.  $[0.0 \ 4.0 \ 3.0] \times [-2.0 \ -3.0 \ -1.0]$
373.  $[-1.0 \ -3.0 \ 0.0] \cdot [1.0 \ -3.0 \ -5.0]$
374.  $[1.0 \ -4.0 \ 1.0] \cdot [-4.0 \ -3.0 \ -3.0]$
375. normalize  $[-4.0 \ -4.0 \ -4.0]$
376.  $[-5.0 \ 3.0 \ -4.0] + [-1.0 \ 1.0 \ -5.0]$
377.  $||[3.0 \ 2.0 \ 2.0]||$
378. What is the relationship between the following two vectors?  $[2.0 \ -2.0 \ 0.0]$ ,  $[-5.0 \ -3.0 \ -5.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
379.  $||[-4.0 \ -3.0 \ 2.0]||$

380. What is the relationship between the following two vectors?  $[-1.0 \ 0.0 \ -4.0]$ ,  $[-1.0 \ -5.0 \ 0.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
381. What is the angle between the following two vectors (in radians)?  $[3.0 \ 4.0 \ -4.0]$ ,  $[1.0 \ 2.0 \ 2.0]$
382.  $[-5.0 \ 3.0 \ 2.0] \cdot [-2.0 \ -2.0 \ -4.0]$
383. What is the angle between the following two vectors (in radians)?  $[-5.0 \ 4.0 \ -5.0]$ ,  $[0.0 \ 2.0 \ -5.0]$
384.  $[-1.0 \ 2.0 \ -5.0] \cdot [3.0 \ 0.0 \ 4.0]$
385.  $[-4.0 \ -2.0 \ -5.0] \cdot [1.0 \ -1.0 \ -2.0]$
386. What is the angle between the following two vectors (in radians)?  $[0.0 \ 4.0 \ 0.0]$ ,  $[-5.0 \ 2.0 \ 2.0]$
387. What is the vector from  $[2.0 \ 3.0 \ 3.0]$  to  $[0.0 \ 2.0 \ 0.0]$ ?
388. What is the vector from  $[-1.0 \ -3.0 \ -4.0]$  to  $[3.0 \ 1.0 \ -3.0]$ ?
389.  $[-2.0 \ -4.0 \ -3.0] \cdot [-2.0 \ 1.0 \ 0.0]$
390.  $[2.0 \ 3.0 \ -1.0] \cdot [0.0 \ 4.0 \ -2.0]$
391. What is the vector from  $[3.0 \ -1.0 \ 1.0]$  to  $[2.0 \ -1.0 \ 0.0]$ ?
392. What is the angle between the following two vectors (in radians)?  $[-3.0 \ -5.0 \ -4.0]$ ,  $[2.0 \ -2.0 \ -5.0]$
393.  $[-4.0 \ -3.0 \ 2.0] \cdot [3.0 \ -2.0 \ 1.0]$
394. What is the relationship between the following two vectors?  $[1.0 \ -4.0 \ -3.0]$ ,  $[0.0 \ 2.0 \ -1.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
395.  $[-2.0 \ 4.0 \ -3.0] \cdot [3.0 \ -1.0 \ -5.0]$
396. What is the angle between the following two vectors (in radians)?  $[-3.0 \ -4.0 \ -4.0]$ ,  $[-4.0 \ 1.0 \ 1.0]$
397.  $[2.0 \ 4.0 \ 3.0] + [3.0 \ 4.0 \ 4.0]$
398.  $[0.0 \ 3.0 \ -3.0] + [-4.0 \ -3.0 \ 1.0]$
399.  $||[-3.0 \ 3.0 \ -3.0]||$
400. What is the relationship between the following two vectors?  $[-3.0 \ -2.0 \ -4.0]$ ,  $[0.0 \ 1.0 \ 4.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
401.  $||[1.0 \ 1.0 \ 2.0]||$
402.  $||[0.0 \ -2.0 \ 0.0]||$
403.  $[-5.0 \ -5.0 \ -5.0] \cdot [-3.0 \ -1.0 \ 1.0]$



404. What is the vector from  $[2.0 \ 2.0 \ -3.0]$  to  $[3.0 \ -1.0 \ -4.0]$ ?
405.  $[3.0 \ 4.0 \ -3.0] \cdot [3.0 \ -4.0 \ 2.0]$
406. normalize  $[4.0 \ -5.0 \ -3.0]$
407. What is the relationship between the following two vectors?  $[-3.0 \ 3.0 \ -3.0]$ ,  $[-2.0 \ 0.0 \ -3.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
408. What is the relationship between the following two vectors?  $[-3.0 \ -3.0 \ 3.0]$ ,  $[-1.0 \ -4.0 \ -4.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
409.  $[-3.0 \ 1.0 \ -5.0] + [-4.0 \ 2.0 \ 4.0]$
410.  $[-4.0 \ 3.0 \ -1.0] + [-1.0 \ -2.0 \ 0.0]$
411. normalize  $[0.0 \ 1.0 \ -3.0]$
412. normalize  $[0.0 \ 0.0 \ 4.0]$
413.  $[-2.0 \ -5.0 \ 2.0] \cdot [3.0 \ -2.0 \ 4.0]$
414. normalize  $[-2.0 \ -4.0 \ 3.0]$
415.  $[-2.0 \ 3.0 \ -2.0] \times [1.0 \ 4.0 \ -4.0]$
416.  $[0.0 \ -1.0 \ 0.0] \times [-4.0 \ 1.0 \ 4.0]$
417. What is the vector from  $[0.0 \ 2.0 \ -5.0]$  to  $[1.0 \ 2.0 \ -5.0]$ ?
418.  $[0.0 \ -4.0 \ -5.0] + [-3.0 \ 3.0 \ -3.0]$
419.  $[-2.0 \ 1.0 \ -2.0] \cdot [0.0 \ 4.0 \ -5.0]$
420. What is the angle between the following two vectors (in radians)?  $[2.0 \ 3.0 \ -2.0]$ ,  $[-5.0 \ -3.0 \ 1.0]$
421. normalize  $[-3.0 \ -3.0 \ 2.0]$
422.  $[0.0 \ 2.0 \ -3.0] \times [0.0 \ -2.0 \ -4.0]$
423.  $[-3.0 \ 4.0 \ 3.0] + [-5.0 \ -1.0 \ 4.0]$
424.  $[-5.0 \ 0.0 \ -5.0] + [-4.0 \ -2.0 \ 2.0]$
425.  $[2.0 \ 4.0 \ 0.0] \times [-5.0 \ -4.0 \ -5.0]$
426. normalize  $[-3.0 \ -4.0 \ 3.0]$
427. What is the relationship between the following two vectors?  $[-1.0 \ 0.0 \ 3.0]$ ,  $[3.0 \ -5.0 \ -1.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
428.  $[4.0 \ -1.0 \ -1.0] \cdot [-3.0 \ 1.0 \ 0.0]$
429. normalize  $[-1.0 \ -4.0 \ -4.0]$

430. What is the angle between the following two vectors (in radians)?  $[2.0 \ -1.0 \ 4.0]$ ,  $[1.0 \ -2.0 \ -5.0]$
431. normalize  $[-4.0 \ 4.0 \ -4.0]$
432.  $[2.0 \ -5.0 \ -5.0] \cdot [-2.0 \ -2.0 \ -3.0]$
433. What is the relationship between the following two vectors?  $[-2.0 \ -1.0 \ 0.0]$ ,  $[4.0 \ -2.0 \ -1.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
434. What is the angle between the following two vectors (in radians)?  $[-4.0 \ -3.0 \ 4.0]$ ,  $[0.0 \ -3.0 \ -3.0]$
435.  $||[-2.0 \ -3.0 \ 3.0]||$
436.  $[4.0 \ 3.0 \ 0.0] \times [1.0 \ -4.0 \ -4.0]$
437.  $[-3.0 \ -4.0 \ -2.0] \cdot [4.0 \ -3.0 \ 0.0]$
438. What is the vector from  $[-2.0 \ 2.0 \ 2.0]$  to  $[4.0 \ -3.0 \ 4.0]$ ?
439. What is the relationship between the following two vectors?  $[0.0 \ 1.0 \ 4.0]$ ,  $[-3.0 \ -2.0 \ 0.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
440. What is the angle between the following two vectors (in radians)?  $[-1.0 \ -5.0 \ -4.0]$ ,  $[3.0 \ -1.0 \ 0.0]$
441. What is the relationship between the following two vectors?  $[-3.0 \ 0.0 \ -3.0]$ ,  $[2.0 \ 4.0 \ 3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
442.  $[-5.0 \ 1.0 \ 4.0] + [3.0 \ -4.0 \ 3.0]$
443. What is the relationship between the following two vectors?  $[3.0 \ -1.0 \ 2.0]$ ,  $[1.0 \ -5.0 \ -4.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
444.  $[0.0 \ -3.0 \ -1.0] \cdot [4.0 \ 4.0 \ 0.0]$
445.  $[3.0 \ -1.0 \ -1.0] + [-2.0 \ 2.0 \ 3.0]$
446.  $[0.0 \ -1.0 \ -2.0] + [2.0 \ 3.0 \ 4.0]$
447. What is the relationship between the following two vectors?  $[4.0 \ 4.0 \ 3.0]$ ,  $[-4.0 \ 0.0 \ -5.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
448. What is the relationship between the following two vectors?  $[-4.0 \ 2.0 \ 3.0]$ ,  $[-4.0 \ 2.0 \ -3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
449.  $[-3.0 \ 2.0 \ -4.0] + [2.0 \ -2.0 \ 4.0]$
450. What is the angle between the following two vectors (in radians)?  $[-2.0 \ 0.0 \ -5.0]$ ,  $[1.0 \ 1.0 \ 1.0]$

451. What is the relationship between the following two vectors?  $[4.0 \ -2.0 \ 3.0]$ ,  $[-3.0 \ 2.0 \ 4.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
452.  $[-3.0 \ 4.0 \ -2.0] + [2.0 \ 2.0 \ -2.0]$
453. What is the relationship between the following two vectors?  $[3.0 \ -5.0 \ 2.0]$ ,  $[-4.0 \ 2.0 \ -3.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
454. normalize  $[-2.0 \ 4.0 \ 3.0]$
455.  $[2.0 \ 0.0 \ -3.0] + [2.0 \ -2.0 \ 0.0]$
456. What is the relationship between the following two vectors?  $[2.0 \ 4.0 \ 3.0]$ ,  $[-2.0 \ -2.0 \ -3.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
457. What is the relationship between the following two vectors?  $[-2.0 \ 0.0 \ 4.0]$ ,  $[4.0 \ -2.0 \ 3.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
458. What is the vector from  $[2.0 \ 4.0 \ -1.0]$  to  $[0.0 \ -5.0 \ -4.0]$ ?
459.  $[1.0 \ 2.0 \ -4.0] \times [-4.0 \ 1.0 \ -3.0]$
460. What is the vector from  $[3.0 \ 0.0 \ 2.0]$  to  $[3.0 \ 2.0 \ 2.0]$ ?
461. What is the angle between the following two vectors (in radians)?  $[4.0 \ 2.0 \ 2.0]$ ,  $[3.0 \ 0.0 \ 4.0]$
462.  $||[-1.0 \ -2.0 \ -4.0]||$
463.  $||[4.0 \ -3.0 \ 4.0]||$
464.  $[-2.0 \ 1.0 \ 3.0] + [3.0 \ 4.0 \ -3.0]$
465. What is the angle between the following two vectors (in radians)?  $[4.0 \ -5.0 \ -1.0]$ ,  $[-4.0 \ -4.0 \ 2.0]$
466.  $[-2.0 \ 0.0 \ 1.0] + [2.0 \ -2.0 \ 0.0]$
467.  $[4.0 \ 3.0 \ -5.0] + [3.0 \ -4.0 \ 4.0]$
468.  $[2.0 \ 1.0 \ 0.0] \cdot [0.0 \ -3.0 \ -1.0]$
469.  $[-4.0 \ 0.0 \ -2.0] \times [-4.0 \ 4.0 \ 2.0]$
470.  $[-3.0 \ 1.0 \ -2.0] \cdot [-4.0 \ -1.0 \ 3.0]$
471. What is the angle between the following two vectors (in radians)?  $[-5.0 \ -1.0 \ 1.0]$ ,  $[0.0 \ 2.0 \ -3.0]$
472.  $[-2.0 \ 4.0 \ -2.0] \cdot [-2.0 \ -5.0 \ 0.0]$
473.  $||[4.0 \ 4.0 \ -1.0]||$
474. What is the angle between the following two vectors (in radians)?  $[4.0 \ -3.0 \ 3.0]$ ,  $[-5.0 \ -1.0 \ 1.0]$

475.  $[3.0 \ 4.0 \ -1.0] + [2.0 \ -2.0 \ 2.0]$
476.  $||[-4.0 \ -3.0 \ 4.0]||$
477. What is the vector from  $[4.0 \ -1.0 \ -3.0]$  to  $[-5.0 \ 0.0 \ 1.0]$ ?
478. normalize  $[4.0 \ 4.0 \ -5.0]$
479. What is the relationship between the following two vectors?  $[4.0 \ -4.0 \ -3.0]$ ,  $[-3.0 \ -2.0 \ 4.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
480. What is the relationship between the following two vectors?  $[3.0 \ 1.0 \ 4.0]$ ,  $[-2.0 \ 3.0 \ 1.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
481. What is the angle between the following two vectors (in radians)?  $[-1.0 \ -2.0 \ -2.0]$ ,  $[2.0 \ 0.0 \ -3.0]$
482.  $||[1.0 \ -3.0 \ 1.0]||$
483. What is the relationship between the following two vectors?  $[3.0 \ -1.0 \ 3.0]$ ,  $[-2.0 \ -4.0 \ -4.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
484.  $[-3.0 \ 3.0 \ -2.0] \times [-1.0 \ -2.0 \ 4.0]$
485.  $||[1.0 \ -1.0 \ 4.0]||$
486. What is the vector from  $[-3.0 \ 2.0 \ -5.0]$  to  $[1.0 \ -2.0 \ 2.0]$ ?
487.  $[3.0 \ -1.0 \ -5.0] + [-3.0 \ 1.0 \ -4.0]$
488.  $[-2.0 \ -4.0 \ 3.0] \cdot [4.0 \ -2.0 \ -2.0]$
489.  $[-3.0 \ -3.0 \ 1.0] + [-3.0 \ -5.0 \ -5.0]$
490. What is the angle between the following two vectors (in radians)?  $[4.0 \ -3.0 \ -2.0]$ ,  $[0.0 \ 4.0 \ -2.0]$
491.  $[-4.0 \ -3.0 \ 3.0] \cdot [0.0 \ 3.0 \ 4.0]$
492.  $[4.0 \ 0.0 \ -2.0] \times [-2.0 \ 4.0 \ -2.0]$
493.  $||[3.0 \ -2.0 \ -5.0]||$
494. What is the relationship between the following two vectors?  $[4.0 \ -2.0 \ 0.0]$ ,  $[-1.0 \ 2.0 \ -1.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
495. What is the vector from  $[-5.0 \ -4.0 \ 3.0]$  to  $[-1.0 \ 3.0 \ -1.0]$ ?
496.  $[2.0 \ 2.0 \ -5.0] + [-1.0 \ 3.0 \ -5.0]$
497. What is the angle between the following two vectors (in radians)?  $[-2.0 \ 0.0 \ -1.0]$ ,  $[-4.0 \ -5.0 \ 3.0]$
498.  $[-5.0 \ -1.0 \ -1.0] \cdot [4.0 \ -1.0 \ -1.0]$

499. What is the relationship between the following two vectors?  $[4.0 \ -3.0 \ -2.0]$ ,  $[-4.0 \ -3.0 \ 4.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
500. normalize  $[1.0 \ 3.0 \ 4.0]$
501.  $||[4.0 \ 1.0 \ 0.0]||$
502.  $[1.0 \ -4.0 \ -5.0] \times [4.0 \ 4.0 \ -1.0]$
503.  $[0.0 \ 1.0 \ -1.0] \cdot [-2.0 \ -1.0 \ 3.0]$
504.  $[2.0 \ -4.0 \ -4.0] \cdot [-1.0 \ 1.0 \ -3.0]$
505. What is the vector from  $[3.0 \ 1.0 \ -2.0]$  to  $[-2.0 \ 0.0 \ -1.0]$ ?
506. What is the angle between the following two vectors (in radians)?  $[-5.0 \ 2.0 \ -4.0]$ ,  $[0.0 \ -2.0 \ 3.0]$
507. What is the angle between the following two vectors (in radians)?  $[-2.0 \ -2.0 \ -2.0]$ ,  $[-1.0 \ -1.0 \ 1.0]$
508.  $[3.0 \ 1.0 \ -5.0] \times [1.0 \ -1.0 \ -5.0]$
509.  $[-5.0 \ -5.0 \ 4.0] + [0.0 \ -5.0 \ 4.0]$
510. normalize  $[0.0 \ 2.0 \ -1.0]$
511.  $||[4.0 \ 2.0 \ -1.0]||$
512.  $[0.0 \ 0.0 \ -2.0] + [-2.0 \ 0.0 \ 4.0]$
513. What is the relationship between the following two vectors?  $[-1.0 \ -5.0 \ 2.0]$ ,  $[-2.0 \ -1.0 \ -2.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
514.  $[0.0 \ -2.0 \ 4.0] \cdot [-2.0 \ 0.0 \ 3.0]$
515.  $[-1.0 \ 2.0 \ -4.0] + [-5.0 \ 0.0 \ 4.0]$
516.  $||[-5.0 \ 3.0 \ -4.0]||$
517.  $[1.0 \ -1.0 \ -4.0] + [1.0 \ -2.0 \ -5.0]$
518. What is the vector from  $[1.0 \ -3.0 \ -4.0]$  to  $[-2.0 \ -5.0 \ 4.0]$ ?
519.  $[-3.0 \ -4.0 \ 3.0] \times [-4.0 \ -4.0 \ -5.0]$
520.  $[0.0 \ -1.0 \ -1.0] \times [0.0 \ 1.0 \ -1.0]$
521. What is the relationship between the following two vectors?  $[-2.0 \ 3.0 \ -3.0]$ ,  $[-3.0 \ 0.0 \ 0.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
522.  $[3.0 \ -1.0 \ -1.0] \times [2.0 \ -3.0 \ 1.0]$
523. normalize  $[1.0 \ -4.0 \ 2.0]$

524.  $[-2.0 \ -1.0 \ 0.0] + [4.0 \ -5.0 \ -3.0]$
525.  $||[4.0 \ 2.0 \ -4.0]||$
526. What is the relationship between the following two vectors?  $[1.0 \ -4.0 \ -3.0]$ ,  $[0.0 \ 3.0 \ 2.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
527. What is the angle between the following two vectors (in radians)?  $[-2.0 \ 0.0 \ -4.0]$ ,  $[4.0 \ -1.0 \ 1.0]$
528.  $[-2.0 \ -4.0 \ -4.0] \times [3.0 \ 2.0 \ -5.0]$
529. What is the angle between the following two vectors (in radians)?  $[-5.0 \ 1.0 \ -4.0]$ ,  $[2.0 \ -2.0 \ -5.0]$
530.  $[-4.0 \ -5.0 \ -4.0] + [-4.0 \ -2.0 \ 3.0]$
531. What is the vector from  $[3.0 \ 4.0 \ -1.0]$  to  $[3.0 \ 0.0 \ 0.0]$ ?
532.  $[-5.0 \ 4.0 \ 0.0] + [3.0 \ 3.0 \ 1.0]$
533.  $[1.0 \ -3.0 \ 2.0] \cdot [-2.0 \ -3.0 \ 4.0]$
534. What is the angle between the following two vectors (in radians)?  $[3.0 \ -4.0 \ 1.0]$ ,  $[1.0 \ -1.0 \ 2.0]$
535.  $||[-5.0 \ -4.0 \ -3.0]||$
536. What is the angle between the following two vectors (in radians)?  $[-2.0 \ -3.0 \ 4.0]$ ,  $[-5.0 \ -5.0 \ -3.0]$
537.  $[-2.0 \ 1.0 \ 3.0] + [2.0 \ -2.0 \ -1.0]$
538.  $||[1.0 \ 2.0 \ -1.0]||$
539.  $[4.0 \ 4.0 \ 2.0] \times [3.0 \ 2.0 \ -3.0]$
540.  $[2.0 \ 1.0 \ -3.0] + [2.0 \ 3.0 \ 2.0]$
541. What is the relationship between the following two vectors?  $[0.0 \ 2.0 \ 0.0]$ ,  $[4.0 \ 1.0 \ -2.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
542.  $[0.0 \ -2.0 \ -5.0] \cdot [0.0 \ -3.0 \ -3.0]$
543. What is the vector from  $[1.0 \ -5.0 \ -1.0]$  to  $[1.0 \ -2.0 \ -5.0]$ ?
544.  $[4.0 \ -4.0 \ 3.0] + [-3.0 \ 1.0 \ -4.0]$
545.  $[-2.0 \ 2.0 \ -1.0] \cdot [-1.0 \ -5.0 \ -4.0]$
546.  $||[0.0 \ -3.0 \ 4.0]||$
547. What is the relationship between the following two vectors?  $[2.0 \ 0.0 \ 1.0]$ ,  $[0.0 \ 3.0 \ -3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
548.  $||[2.0 \ -4.0 \ -1.0]||$
549. What is the vector from  $[3.0 \ 2.0 \ -1.0]$  to  $[-4.0 \ -1.0 \ 2.0]$ ?

550. normalize  $[-4.0 \ 2.0 \ 1.0]$
551. normalize  $[-2.0 \ -3.0 \ 0.0]$
552.  $[2.0 \ -2.0 \ -1.0] \cdot [0.0 \ 0.0 \ -3.0]$
553.  $[-3.0 \ -3.0 \ 4.0] + [0.0 \ 0.0 \ 4.0]$
554. normalize  $[-2.0 \ -4.0 \ 2.0]$
555.  $||[4.0 \ 2.0 \ 3.0]||$
556.  $[1.0 \ -2.0 \ -4.0] \cdot [-1.0 \ 1.0 \ -1.0]$
557.  $[-2.0 \ 1.0 \ -2.0] \cdot [3.0 \ -4.0 \ -3.0]$
558. normalize  $[4.0 \ 0.0 \ 4.0]$
559.  $[2.0 \ 2.0 \ -4.0] \cdot [4.0 \ 2.0 \ 1.0]$
560.  $[-2.0 \ 3.0 \ 1.0] + [-2.0 \ -3.0 \ -3.0]$
561. What is the angle between the following two vectors (in radians)?  $[4.0 \ 3.0 \ 1.0], [-4.0 \ 3.0 \ 2.0]$
562.  $||[-5.0 \ 3.0 \ 1.0]||$
563. What is the relationship between the following two vectors?  $[2.0 \ 0.0 \ -3.0], [-4.0 \ -3.0 \ 4.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
564.  $[-4.0 \ 0.0 \ -3.0] + [-2.0 \ -2.0 \ 2.0]$
565. What is the angle between the following two vectors (in radians)?  $[3.0 \ -1.0 \ 2.0], [3.0 \ 1.0 \ 3.0]$
566. What is the relationship between the following two vectors?  $[2.0 \ -1.0 \ -4.0], [3.0 \ 2.0 \ 3.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
567.  $[-1.0 \ -5.0 \ -3.0] \cdot [-3.0 \ 0.0 \ -5.0]$
568. What is the angle between the following two vectors (in radians)?  $[4.0 \ 0.0 \ 2.0], [-4.0 \ -1.0 \ 1.0]$
569. What is the relationship between the following two vectors?  $[-1.0 \ -1.0 \ 2.0], [-4.0 \ -2.0 \ 1.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
570.  $||[-3.0 \ -4.0 \ -5.0]||$
571. What is the vector from  $[-2.0 \ 3.0 \ 0.0]$  to  $[3.0 \ -3.0 \ 2.0]$ ?
572.  $[-5.0 \ -3.0 \ 2.0] \times [3.0 \ -2.0 \ 3.0]$
573.  $||[-3.0 \ 3.0 \ -1.0]||$
574.  $[2.0 \ 1.0 \ 3.0] + [2.0 \ -5.0 \ 1.0]$
575.  $||[-3.0 \ -4.0 \ -3.0]||$

576.  $[3.0 \ -4.0 \ 0.0] \cdot [3.0 \ 3.0 \ -2.0]$
577. What is the vector from  $[-2.0 \ -2.0 \ -3.0]$  to  $[-3.0 \ -4.0 \ 4.0]$ ?
578. What is the relationship between the following two vectors?  $[0.0 \ 0.0 \ -2.0]$ ,  $[-1.0 \ 0.0 \ -5.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
579. What is the vector from  $[3.0 \ 0.0 \ -5.0]$  to  $[0.0 \ -4.0 \ -2.0]$ ?
580.  $[2.0 \ -5.0 \ 4.0] \times [-1.0 \ -4.0 \ -2.0]$
581.  $[-5.0 \ -4.0 \ 1.0] \cdot [2.0 \ -3.0 \ 3.0]$
582.  $||[2.0 \ -5.0 \ 0.0]||$
583.  $[-2.0 \ 0.0 \ -5.0] \times [4.0 \ 2.0 \ 1.0]$
584. What is the vector from  $[0.0 \ 0.0 \ -2.0]$  to  $[0.0 \ 0.0 \ 0.0]$ ?
585. What is the angle between the following two vectors (in radians)?  $[-4.0 \ -1.0 \ -3.0]$ ,  $[-5.0 \ 2.0 \ -2.0]$
586.  $[3.0 \ -3.0 \ -2.0] \times [1.0 \ 3.0 \ 4.0]$
587. normalize  $[1.0 \ 0.0 \ 2.0]$
588.  $[-4.0 \ -5.0 \ 0.0] + [0.0 \ -5.0 \ 3.0]$
589.  $[1.0 \ 4.0 \ -3.0] \cdot [0.0 \ -5.0 \ 1.0]$
590.  $[-1.0 \ -3.0 \ 3.0] + [1.0 \ 1.0 \ 3.0]$
591. normalize  $[-5.0 \ -2.0 \ -4.0]$
592. What is the vector from  $[0.0 \ -3.0 \ 2.0]$  to  $[1.0 \ 3.0 \ 4.0]$ ?
593.  $[-5.0 \ 2.0 \ -2.0] \times [1.0 \ -2.0 \ -1.0]$
594.  $[1.0 \ 0.0 \ -3.0] \cdot [-1.0 \ 3.0 \ 2.0]$
595.  $||[-5.0 \ 0.0 \ -2.0]||$
596.  $[0.0 \ 1.0 \ -4.0] \cdot [-5.0 \ 3.0 \ 3.0]$
597.  $[-3.0 \ 0.0 \ -5.0] \times [-4.0 \ -4.0 \ -2.0]$
598. normalize  $[4.0 \ -4.0 \ 2.0]$
599. What is the vector from  $[0.0 \ 0.0 \ -1.0]$  to  $[3.0 \ 4.0 \ 3.0]$ ?
600. What is the relationship between the following two vectors?  $[3.0 \ -3.0 \ 4.0]$ ,  $[1.0 \ 4.0 \ -5.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
601. What is the vector from  $[-4.0 \ 1.0 \ -3.0]$  to  $[-3.0 \ 4.0 \ -2.0]$ ?



602.  $[-2.0 \ -4.0 \ -5.0] + [3.0 \ -3.0 \ -4.0]$
603.  $||[3.0 \ 3.0 \ -5.0]||$
604. What is the relationship between the following two vectors?  $[1.0 \ 3.0 \ 0.0]$ ,  $[0.0 \ 1.0 \ 3.0]$  a) They point in the same direction b) they point in opposite directions c) they are perpendicular
605. What is the angle between the following two vectors (in radians)?  $[1.0 \ 0.0 \ -4.0]$ ,  $[-1.0 \ 4.0 \ 0.0]$
606. normalize  $[1.0 \ -1.0 \ 3.0]$
607. What is the vector from  $[-1.0 \ 2.0 \ -5.0]$  to  $[4.0 \ -4.0 \ 4.0]$ ?
608. normalize  $[3.0 \ 0.0 \ -4.0]$
609. What is the angle between the following two vectors (in radians)?  $[2.0 \ 2.0 \ 4.0]$ ,  $[4.0 \ -3.0 \ 3.0]$
610. What is the vector from  $[3.0 \ 3.0 \ -3.0]$  to  $[-1.0 \ 0.0 \ 3.0]$ ?
611.  $[-1.0 \ 2.0 \ 2.0] + [2.0 \ 4.0 \ -5.0]$
612. What is the relationship between the following two vectors?  $[0.0 \ -4.0 \ -5.0]$ ,  $[2.0 \ -4.0 \ -4.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
613.  $||[-1.0 \ -5.0 \ 3.0]||$
614.  $[-4.0 \ 3.0 \ -3.0] \times [-1.0 \ 0.0 \ -5.0]$
615.  $[-3.0 \ -3.0 \ 3.0] + [4.0 \ 4.0 \ -2.0]$
616.  $[-2.0 \ 3.0 \ 2.0] + [3.0 \ -3.0 \ 2.0]$
617.  $||[1.0 \ -4.0 \ 4.0]||$
618.  $||[3.0 \ -2.0 \ 4.0]||$
619. What is the vector from  $[-2.0 \ 1.0 \ 4.0]$  to  $[-3.0 \ 3.0 \ -5.0]$ ?
620. What is the vector from  $[-1.0 \ -4.0 \ -1.0]$  to  $[-2.0 \ -2.0 \ 2.0]$ ?
621. What is the angle between the following two vectors (in radians)?  $[3.0 \ -1.0 \ -1.0]$ ,  $[-5.0 \ 0.0 \ 3.0]$
622. What is the vector from  $[3.0 \ -1.0 \ 2.0]$  to  $[-4.0 \ -1.0 \ -5.0]$ ?
623.  $[0.0 \ 3.0 \ 3.0] \times [4.0 \ -5.0 \ 4.0]$
624. What is the relationship between the following two vectors?  $[-5.0 \ 4.0 \ -1.0]$ ,  $[3.0 \ -5.0 \ 1.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
625.  $||[4.0 \ 3.0 \ -5.0]||$
626.  $[-4.0 \ 1.0 \ 1.0] \times [2.0 \ -2.0 \ 3.0]$
627.  $[3.0 \ 4.0 \ 2.0] \cdot [-3.0 \ -5.0 \ -4.0]$

628. What is the angle between the following two vectors (in radians)?  $[1.0 \ 3.0 \ -4.0]$ ,  $[-5.0 \ 0.0 \ 3.0]$
629. What is the angle between the following two vectors (in radians)?  $[-2.0 \ 3.0 \ -2.0]$ ,  $[0.0 \ 0.0 \ 1.0]$
630.  $[4.0 \ 0.0 \ -2.0] + [-3.0 \ -4.0 \ 1.0]$
631. normalize  $[4.0 \ -3.0 \ 3.0]$
632.  $[4.0 \ 3.0 \ 4.0] \times [2.0 \ -3.0 \ -3.0]$
633.  $[-2.0 \ 2.0 \ 0.0] \times [-1.0 \ -3.0 \ -1.0]$
634.  $[4.0 \ 3.0 \ 3.0] + [1.0 \ -4.0 \ 2.0]$
635. What is the angle between the following two vectors (in radians)?  $[-4.0 \ 3.0 \ -5.0]$ ,  $[-2.0 \ -5.0 \ 4.0]$
636. What is the relationship between the following two vectors?  $[-4.0 \ 3.0 \ -3.0]$ ,  $[3.0 \ 4.0 \ -5.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
637. What is the angle between the following two vectors (in radians)?  $[2.0 \ 2.0 \ -1.0]$ ,  $[2.0 \ -4.0 \ 3.0]$
638. What is the angle between the following two vectors (in radians)?  $[0.0 \ 2.0 \ -3.0]$ ,  $[-1.0 \ 4.0 \ -2.0]$
639. normalize  $[-1.0 \ 4.0 \ 1.0]$
640.  $||[4.0 \ -4.0 \ -1.0]||$
641.  $||[-5.0 \ -1.0 \ 2.0]||$
642.  $[-5.0 \ 3.0 \ 4.0] \times [4.0 \ 1.0 \ -4.0]$
643.  $[1.0 \ 4.0 \ -1.0] + [-4.0 \ 4.0 \ 2.0]$
644. What is the vector from  $[4.0 \ 1.0 \ -3.0]$  to  $[-1.0 \ -4.0 \ -1.0]$ ?
645. What is the relationship between the following two vectors?  $[-4.0 \ 0.0 \ 4.0]$ ,  $[-2.0 \ -3.0 \ -3.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
646. normalize  $[3.0 \ -4.0 \ 1.0]$
647. normalize  $[-5.0 \ -5.0 \ -2.0]$
648.  $[4.0 \ 2.0 \ 2.0] \times [-4.0 \ -3.0 \ 2.0]$
649. What is the vector from  $[0.0 \ 2.0 \ 0.0]$  to  $[4.0 \ -2.0 \ 3.0]$ ?
650.  $[-2.0 \ -1.0 \ -3.0] \cdot [0.0 \ 1.0 \ -1.0]$
651. What is the vector from  $[-4.0 \ -5.0 \ -5.0]$  to  $[2.0 \ 0.0 \ -1.0]$ ?
652.  $[4.0 \ 1.0 \ -5.0] \cdot [-2.0 \ -3.0 \ -3.0]$
653.  $||[-4.0 \ -4.0 \ 4.0]||$

654. What is the relationship between the following two vectors?  $[-1.0 \ -1.0 \ 4.0]$ ,  $[2.0 \ 3.0 \ -4.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
655.  $[-4.0 \ 3.0 \ -1.0] \cdot [-4.0 \ 1.0 \ 1.0]$
656.  $||[3.0 \ -5.0 \ -2.0]||$
657. What is the angle between the following two vectors (in radians)?  $[-1.0 \ -5.0 \ -1.0]$ ,  $[-3.0 \ -4.0 \ 0.0]$
658. What is the angle between the following two vectors (in radians)?  $[-3.0 \ -4.0 \ 0.0]$ ,  $[-5.0 \ 4.0 \ -2.0]$
659. What is the angle between the following two vectors (in radians)?  $[1.0 \ -2.0 \ 4.0]$ ,  $[4.0 \ -4.0 \ 3.0]$
660. What is the vector from  $[-2.0 \ -4.0 \ 0.0]$  to  $[-4.0 \ 4.0 \ -1.0]$ ?
661.  $[-5.0 \ -4.0 \ -4.0] + [2.0 \ 4.0 \ 2.0]$
662.  $[2.0 \ 1.0 \ -4.0] + [0.0 \ 4.0 \ 4.0]$
663. normalize  $[-3.0 \ 1.0 \ -5.0]$
664. normalize  $[2.0 \ 2.0 \ -1.0]$
665. What is the angle between the following two vectors (in radians)?  $[1.0 \ 0.0 \ 0.0]$ ,  $[-3.0 \ -3.0 \ 2.0]$
666. normalize  $[0.0 \ 1.0 \ -2.0]$
667. What is the relationship between the following two vectors?  $[-4.0 \ -1.0 \ 1.0]$ ,  $[-5.0 \ 2.0 \ -3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
668. What is the relationship between the following two vectors?  $[-2.0 \ 1.0 \ -5.0]$ ,  $[-1.0 \ -1.0 \ -4.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
669. What is the relationship between the following two vectors?  $[2.0 \ 2.0 \ 4.0]$ ,  $[3.0 \ -1.0 \ -3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
670. What is the relationship between the following two vectors?  $[-5.0 \ -5.0 \ -2.0]$ ,  $[-3.0 \ 3.0 \ 1.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
671. What is the angle between the following two vectors (in radians)?  $[2.0 \ 0.0 \ -3.0]$ ,  $[4.0 \ 0.0 \ 0.0]$
672. normalize  $[4.0 \ -2.0 \ 2.0]$
673. normalize  $[-4.0 \ -1.0 \ -3.0]$
674. What is the relationship between the following two vectors?  $[1.0 \ -2.0 \ 2.0]$ ,  $[-3.0 \ -1.0 \ 4.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular

675.  $[-1.0 \ 2.0 \ -4.0] \cdot [1.0 \ 2.0 \ 4.0]$
676. What is the angle between the following two vectors (in radians)?  $[-4.0 \ -2.0 \ 4.0], [1.0 \ -2.0 \ 3.0]$
677. What is the relationship between the following two vectors?  $[-1.0 \ 3.0 \ 3.0], [-5.0 \ 2.0 \ -4.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
678.  $[2.0 \ -4.0 \ 3.0] \times [3.0 \ 1.0 \ -2.0]$
679.  $[2.0 \ -1.0 \ 1.0] \cdot [-4.0 \ 2.0 \ 4.0]$
680. normalize  $[2.0 \ -5.0 \ -3.0]$
681. What is the vector from  $[3.0 \ 1.0 \ 3.0]$  to  $[4.0 \ -2.0 \ 4.0]$ ?
682.  $[-3.0 \ 4.0 \ 3.0] \cdot [0.0 \ 3.0 \ 0.0]$
683. What is the vector from  $[0.0 \ -2.0 \ 0.0]$  to  $[-2.0 \ 1.0 \ 1.0]$ ?
684.  $[-1.0 \ -3.0 \ 2.0] \cdot [3.0 \ 0.0 \ -2.0]$
685. normalize  $[-5.0 \ 0.0 \ 0.0]$
686.  $||[0.0 \ -5.0 \ 3.0]||$
687. What is the vector from  $[-1.0 \ -3.0 \ 4.0]$  to  $[1.0 \ 0.0 \ -5.0]$ ?
688. What is the vector from  $[1.0 \ 3.0 \ -4.0]$  to  $[2.0 \ 4.0 \ -3.0]$ ?
689. What is the angle between the following two vectors (in radians)?  $[2.0 \ 3.0 \ -5.0], [-1.0 \ 2.0 \ 0.0]$
690. What is the vector from  $[-5.0 \ -4.0 \ 2.0]$  to  $[2.0 \ 0.0 \ 0.0]$ ?
691.  $||[-1.0 \ 1.0 \ 0.0]||$
692.  $[-5.0 \ -3.0 \ 1.0] \times [-3.0 \ -2.0 \ -2.0]$
693.  $[-1.0 \ -2.0 \ 1.0] + [-4.0 \ -1.0 \ 4.0]$
694.  $[0.0 \ -3.0 \ -1.0] \cdot [-3.0 \ 4.0 \ 4.0]$
695.  $||[0.0 \ 4.0 \ 2.0]||$
696. What is the angle between the following two vectors (in radians)?  $[-5.0 \ -1.0 \ 0.0], [3.0 \ 1.0 \ 3.0]$
697.  $[-1.0 \ -1.0 \ 4.0] \cdot [-4.0 \ 3.0 \ -4.0]$
698.  $[3.0 \ 0.0 \ -5.0] \cdot [3.0 \ 4.0 \ -3.0]$
699.  $[-1.0 \ 1.0 \ -1.0] \cdot [-1.0 \ -5.0 \ -4.0]$
700. What is the angle between the following two vectors (in radians)?  $[-4.0 \ 4.0 \ -3.0], [3.0 \ -3.0 \ 3.0]$
701.  $[-2.0 \ 4.0 \ 4.0] \cdot [3.0 \ -5.0 \ -5.0]$
702.  $||[1.0 \ 2.0 \ -4.0]||$

703. What is the angle between the following two vectors (in radians)?  $[-2.0 \ 1.0 \ 3.0]$ ,  $[0.0 \ -5.0 \ -5.0]$
704. What is the vector from  $[1.0 \ -2.0 \ 2.0]$  to  $[-1.0 \ -4.0 \ -1.0]$ ?
705. What is the angle between the following two vectors (in radians)?  $[-2.0 \ -3.0 \ -2.0]$ ,  $[3.0 \ -1.0 \ 1.0]$
706.  $\|[1.0 \ 1.0 \ -5.0]\|$
707.  $[4.0 \ -3.0 \ -5.0] + [3.0 \ -2.0 \ -2.0]$
708.  $\|[4.0 \ -1.0 \ -2.0]\|$
709. What is the relationship between the following two vectors?  $[0.0 \ 0.0 \ -1.0]$ ,  $[3.0 \ 4.0 \ -2.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
710.  $[-5.0 \ 1.0 \ 1.0] \cdot [1.0 \ -3.0 \ -3.0]$
711. What is the vector from  $[2.0 \ -4.0 \ 1.0]$  to  $[3.0 \ -3.0 \ 1.0]$ ?
712.  $[4.0 \ -5.0 \ 0.0] + [-4.0 \ 0.0 \ -1.0]$
713.  $[-5.0 \ -2.0 \ -5.0] + [-3.0 \ 4.0 \ 0.0]$
714.  $[-5.0 \ -3.0 \ -2.0] \cdot [0.0 \ 0.0 \ 4.0]$
715.  $[4.0 \ -2.0 \ -1.0] \cdot [-3.0 \ -5.0 \ -5.0]$
716.  $[-1.0 \ 0.0 \ 1.0] + [0.0 \ -5.0 \ -3.0]$
717.  $[1.0 \ 4.0 \ 2.0] \times [1.0 \ -2.0 \ -4.0]$
718.  $\|[1.0 \ -4.0 \ 2.0]\|$
719.  $[1.0 \ 1.0 \ 4.0] + [-3.0 \ 0.0 \ 2.0]$
720. What is the angle between the following two vectors (in radians)?  $[-5.0 \ -1.0 \ -2.0]$ ,  $[4.0 \ 0.0 \ 2.0]$
721.  $\|[0.0 \ 3.0 \ -3.0]\|$
722. What is the relationship between the following two vectors?  $[-3.0 \ 1.0 \ 4.0]$ ,  $[-5.0 \ 2.0 \ 1.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
723.  $[-2.0 \ -1.0 \ -2.0] \times [-2.0 \ -1.0 \ -5.0]$
724. What is the angle between the following two vectors (in radians)?  $[1.0 \ -2.0 \ 1.0]$ ,  $[3.0 \ 3.0 \ 4.0]$
725.  $[-2.0 \ 3.0 \ -2.0] \cdot [-2.0 \ 4.0 \ 3.0]$
726.  $\|[-3.0 \ -4.0 \ 1.0]\|$
727.  $[-2.0 \ 4.0 \ -1.0] + [-5.0 \ 1.0 \ 4.0]$
728.  $[-1.0 \ -5.0 \ 1.0] \cdot [0.0 \ 4.0 \ 0.0]$

729.  $[3.0 \ 0.0 \ -2.0] \times [3.0 \ 3.0 \ -3.0]$
730.  $[-5.0 \ -5.0 \ 0.0] \cdot [-5.0 \ -4.0 \ -1.0]$
731. normalize  $[-5.0 \ -5.0 \ 2.0]$
732.  $||[4.0 \ -1.0 \ -4.0]||$
733. normalize  $[4.0 \ 3.0 \ -2.0]$
734.  $[3.0 \ -1.0 \ -5.0] + [3.0 \ -5.0 \ 4.0]$
735.  $[0.0 \ -1.0 \ 2.0] + [-5.0 \ 2.0 \ -2.0]$
736. normalize  $[0.0 \ 4.0 \ -2.0]$
737.  $[-4.0 \ -2.0 \ -4.0] \cdot [1.0 \ -5.0 \ -3.0]$
738. What is the relationship between the following two vectors?  $[-5.0 \ -4.0 \ 2.0]$ ,  $[4.0 \ 2.0 \ -2.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
739. normalize  $[-4.0 \ -4.0 \ -4.0]$
740.  $[1.0 \ -1.0 \ -3.0] + [0.0 \ -4.0 \ 0.0]$
741. What is the vector from  $[3.0 \ 4.0 \ 3.0]$  to  $[-2.0 \ -4.0 \ -5.0]$ ?
742. What is the angle between the following two vectors (in radians)?  $[-2.0 \ 4.0 \ -4.0]$ ,  $[-4.0 \ -4.0 \ 0.0]$
743. What is the vector from  $[-3.0 \ 3.0 \ 4.0]$  to  $[-1.0 \ 2.0 \ 3.0]$ ?
744. normalize  $[1.0 \ 1.0 \ 3.0]$
745. What is the angle between the following two vectors (in radians)?  $[4.0 \ -2.0 \ 4.0]$ ,  $[-5.0 \ 2.0 \ -1.0]$
746.  $[3.0 \ -4.0 \ -3.0] \cdot [2.0 \ -1.0 \ 3.0]$
747.  $[4.0 \ -4.0 \ 3.0] \cdot [4.0 \ -4.0 \ 0.0]$
748.  $[-5.0 \ 0.0 \ -5.0] \cdot [-4.0 \ 0.0 \ -3.0]$
749. What is the vector from  $[-4.0 \ 3.0 \ 2.0]$  to  $[0.0 \ -1.0 \ 0.0]$ ?
750.  $||[0.0 \ -4.0 \ -5.0]||$
751.  $[3.0 \ -2.0 \ 3.0] \cdot [-5.0 \ -5.0 \ -5.0]$
752.  $||[-1.0 \ 4.0 \ -4.0]||$
753.  $[1.0 \ -1.0 \ 4.0] + [1.0 \ -1.0 \ 2.0]$
754. What is the relationship between the following two vectors?  $[4.0 \ 4.0 \ 2.0]$ ,  $[3.0 \ -4.0 \ 4.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
755.  $[-2.0 \ -5.0 \ -1.0] + [-3.0 \ -4.0 \ 1.0]$

756.  $[-5.0 \ 2.0 \ 2.0] \cdot [2.0 \ 2.0 \ 4.0]$
757.  $[-2.0 \ -1.0 \ -1.0] \cdot [-4.0 \ -1.0 \ -1.0]$
758. What is the relationship between the following two vectors?  $[1.0 \ 0.0 \ -4.0]$ ,  $[-5.0 \ 4.0 \ -3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
759. What is the relationship between the following two vectors?  $[-4.0 \ -3.0 \ -2.0]$ ,  $[-5.0 \ 4.0 \ 0.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
760.  $[-5.0 \ -5.0 \ -5.0] + [-5.0 \ -5.0 \ -5.0]$
761. normalize  $[3.0 \ -4.0 \ -5.0]$
762.  $[2.0 \ -3.0 \ 1.0] \cdot [-5.0 \ 1.0 \ 1.0]$
763. What is the relationship between the following two vectors?  $[-4.0 \ -3.0 \ -3.0]$ ,  $[2.0 \ 0.0 \ -4.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
764. What is the vector from  $[0.0 \ -2.0 \ 2.0]$  to  $[-1.0 \ 4.0 \ 0.0]$ ?
765.  $[4.0 \ 0.0 \ -3.0] \cdot [4.0 \ 3.0 \ 0.0]$
766.  $[0.0 \ -4.0 \ 2.0] + [1.0 \ 2.0 \ -2.0]$
767.  $||[-3.0 \ -4.0 \ 1.0]||$
768.  $[-3.0 \ -2.0 \ -3.0] \cdot [-5.0 \ 2.0 \ 4.0]$
769.  $[-1.0 \ 4.0 \ -2.0] + [-5.0 \ -1.0 \ -2.0]$
770. What is the angle between the following two vectors (in radians)?  $[-2.0 \ 0.0 \ 4.0]$ ,  $[4.0 \ 4.0 \ -2.0]$
771. What is the vector from  $[1.0 \ -3.0 \ -1.0]$  to  $[3.0 \ -2.0 \ -2.0]$ ?
772. What is the vector from  $[3.0 \ 0.0 \ 1.0]$  to  $[0.0 \ -4.0 \ -1.0]$ ?
773. What is the relationship between the following two vectors?  $[0.0 \ -1.0 \ -3.0]$ ,  $[-4.0 \ 2.0 \ -3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
774. normalize  $[-2.0 \ 2.0 \ -2.0]$
775.  $[-1.0 \ 0.0 \ -3.0] \cdot [-5.0 \ 4.0 \ 3.0]$
776.  $[-2.0 \ -1.0 \ 3.0] + [-3.0 \ -1.0 \ 2.0]$
777. What is the vector from  $[-3.0 \ -2.0 \ -3.0]$  to  $[-2.0 \ 2.0 \ -4.0]$ ?
778.  $||[-4.0 \ 2.0 \ 3.0]||$
779. What is the angle between the following two vectors (in radians)?  $[1.0 \ 2.0 \ 1.0]$ ,  $[4.0 \ 2.0 \ 4.0]$

780.  $\| [4.0 \ 2.0 \ -5.0] \|$
781.  $[0.0 \ 0.0 \ -1.0] + [3.0 \ 2.0 \ 4.0]$
782. What is the relationship between the following two vectors?  $[3.0 \ 2.0 \ 3.0]$ ,  $[4.0 \ -3.0 \ 0.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
783.  $[1.0 \ 3.0 \ 2.0] \times [3.0 \ -4.0 \ -4.0]$
784.  $[-3.0 \ -4.0 \ 1.0] + [1.0 \ 3.0 \ 0.0]$
785.  $[2.0 \ 4.0 \ -1.0] + [-2.0 \ -2.0 \ 1.0]$
786. normalize  $[3.0 \ -5.0 \ -2.0]$
787.  $[-1.0 \ -1.0 \ 2.0] \times [-5.0 \ -1.0 \ 1.0]$
788.  $[-3.0 \ -4.0 \ -5.0] \cdot [-1.0 \ 1.0 \ -1.0]$
789.  $\| [-4.0 \ -1.0 \ -3.0] \|$
790.  $\| [0.0 \ 0.0 \ 3.0] \|$
791. What is the relationship between the following two vectors?  $[1.0 \ -5.0 \ -5.0]$ ,  $[-2.0 \ -4.0 \ 1.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
792. What is the relationship between the following two vectors?  $[-4.0 \ 0.0 \ 3.0]$ ,  $[2.0 \ -1.0 \ 3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
793. normalize  $[3.0 \ 4.0 \ -1.0]$
794.  $\| [-4.0 \ -3.0 \ 1.0] \|$
795. What is the vector from  $[-5.0 \ 1.0 \ -5.0]$  to  $[-2.0 \ 2.0 \ -3.0]$ ?
796.  $[1.0 \ -4.0 \ -1.0] \times [-3.0 \ 3.0 \ 0.0]$
797.  $[-2.0 \ 0.0 \ -3.0] + [-4.0 \ -3.0 \ 2.0]$
798. What is the angle between the following two vectors (in radians)?  $[4.0 \ 2.0 \ -2.0]$ ,  $[2.0 \ 1.0 \ 0.0]$
799.  $[-1.0 \ 3.0 \ -5.0] \cdot [3.0 \ 2.0 \ 1.0]$
800.  $[-4.0 \ 2.0 \ 0.0] + [4.0 \ -1.0 \ -3.0]$
801. normalize  $[0.0 \ -3.0 \ -3.0]$
802.  $\| [0.0 \ 4.0 \ 2.0] \|$
803. normalize  $[2.0 \ -3.0 \ 1.0]$
804. What is the relationship between the following two vectors?  $[-4.0 \ -2.0 \ 0.0]$ ,  $[4.0 \ -3.0 \ -1.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular



805. What is the relationship between the following two vectors?  $[4.0 \ 3.0 \ 0.0]$ ,  $[-3.0 \ -5.0 \ 3.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
806. normalize  $[-3.0 \ -1.0 \ -4.0]$
807.  $||[2.0 \ -4.0 \ -3.0]||$
808.  $[-5.0 \ 2.0 \ -5.0] + [-1.0 \ 0.0 \ -2.0]$
809. What is the relationship between the following two vectors?  $[3.0 \ -1.0 \ -1.0]$ ,  $[1.0 \ -3.0 \ 1.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
810.  $[-4.0 \ -1.0 \ -4.0] \cdot [2.0 \ 3.0 \ -1.0]$
811.  $||[-5.0 \ 0.0 \ -3.0]||$
812. normalize  $[2.0 \ -2.0 \ -2.0]$
813. normalize  $[-1.0 \ 2.0 \ 2.0]$
814.  $||[0.0 \ 2.0 \ -4.0]||$
815. What is the vector from  $[-1.0 \ -3.0 \ -4.0]$  to  $[-2.0 \ 0.0 \ -4.0]$ ?
816.  $[-1.0 \ -1.0 \ -5.0] + [3.0 \ 1.0 \ 2.0]$
817.  $[-4.0 \ -1.0 \ -1.0] + [0.0 \ 0.0 \ -4.0]$
818.  $[-4.0 \ -4.0 \ 0.0] + [-1.0 \ 4.0 \ 1.0]$
819. normalize  $[4.0 \ -1.0 \ -4.0]$
820.  $[3.0 \ 0.0 \ 0.0] \cdot [0.0 \ 3.0 \ 3.0]$
821. normalize  $[-4.0 \ -4.0 \ 0.0]$
822.  $[3.0 \ 1.0 \ 3.0] \cdot [-1.0 \ 0.0 \ 4.0]$
823.  $[-2.0 \ 0.0 \ -2.0] \cdot [1.0 \ 1.0 \ 2.0]$
824. normalize  $[-2.0 \ 0.0 \ 0.0]$
825.  $||[-2.0 \ 3.0 \ 4.0]||$
826.  $[2.0 \ -4.0 \ 0.0] \cdot [-1.0 \ 1.0 \ 1.0]$
827.  $||[-4.0 \ 1.0 \ -5.0]||$
828. What is the relationship between the following two vectors?  $[-2.0 \ 2.0 \ -1.0]$ ,  $[4.0 \ -4.0 \ -4.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
829. What is the angle between the following two vectors (in radians)?  $[-3.0 \ 1.0 \ -4.0]$ ,  $[-4.0 \ -5.0 \ 3.0]$

830. What is the relationship between the following two vectors?  $[1.0 \ 2.0 \ -5.0]$ ,  $[1.0 \ 2.0 \ 4.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
831.  $||[3.0 \ -2.0 \ -1.0]||$
832. What is the vector from  $[-3.0 \ -1.0 \ 4.0]$  to  $[1.0 \ -3.0 \ -5.0]$ ?
833. normalize  $[-5.0 \ -4.0 \ 4.0]$
834. What is the angle between the following two vectors (in radians)?  $[1.0 \ -3.0 \ 1.0]$ ,  $[-2.0 \ -5.0 \ 3.0]$
835. normalize  $[-1.0 \ -2.0 \ 1.0]$
836.  $[3.0 \ -1.0 \ -4.0] \times [1.0 \ -4.0 \ 4.0]$
837. What is the vector from  $[-2.0 \ 0.0 \ 1.0]$  to  $[1.0 \ 1.0 \ 0.0]$ ?
838.  $||[-1.0 \ -2.0 \ -4.0]||$
839. What is the angle between the following two vectors (in radians)?  $[-5.0 \ 4.0 \ 4.0]$ ,  $[-5.0 \ 2.0 \ -3.0]$
840. What is the vector from  $[0.0 \ -5.0 \ -4.0]$  to  $[-2.0 \ -4.0 \ 0.0]$ ?
841.  $[-1.0 \ 0.0 \ 4.0] \cdot [4.0 \ 3.0 \ 1.0]$
842.  $[-4.0 \ 3.0 \ 3.0] \times [-5.0 \ -2.0 \ -1.0]$
843.  $[-3.0 \ 3.0 \ -1.0] + [-2.0 \ -3.0 \ -4.0]$
844. What is the vector from  $[-3.0 \ 3.0 \ -3.0]$  to  $[-1.0 \ 0.0 \ -5.0]$ ?
845.  $[4.0 \ -4.0 \ 3.0] \cdot [0.0 \ -3.0 \ -4.0]$
846. What is the angle between the following two vectors (in radians)?  $[4.0 \ -1.0 \ 2.0]$ ,  $[0.0 \ -2.0 \ 1.0]$
847.  $||[3.0 \ 2.0 \ 4.0]||$
848. What is the vector from  $[-2.0 \ -4.0 \ 1.0]$  to  $[1.0 \ -1.0 \ 0.0]$ ?
849. What is the angle between the following two vectors (in radians)?  $[0.0 \ 3.0 \ -5.0]$ ,  $[0.0 \ 4.0 \ -4.0]$
850. What is the relationship between the following two vectors?  $[-2.0 \ 1.0 \ -2.0]$ ,  $[-1.0 \ -1.0 \ -5.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
851. What is the relationship between the following two vectors?  $[4.0 \ -1.0 \ 3.0]$ ,  $[4.0 \ -2.0 \ -5.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
852.  $[-1.0 \ 0.0 \ 0.0] \times [2.0 \ 2.0 \ 1.0]$
853.  $[-1.0 \ 1.0 \ -2.0] \times [-3.0 \ 0.0 \ -3.0]$
854.  $[0.0 \ -1.0 \ -1.0] \times [-3.0 \ 2.0 \ -4.0]$
855.  $[-3.0 \ -3.0 \ -1.0] \cdot [-1.0 \ 2.0 \ -3.0]$

856.  $[3.0 \ -5.0 \ 3.0] \times [0.0 \ -3.0 \ 0.0]$
857. normalize  $[1.0 \ 1.0 \ 2.0]$
858.  $[3.0 \ -5.0 \ -4.0] + [-4.0 \ -3.0 \ 3.0]$
859. What is the vector from  $[1.0 \ 4.0 \ 3.0]$  to  $[0.0 \ -5.0 \ -3.0]$ ?
860.  $[2.0 \ 1.0 \ -2.0] \cdot [2.0 \ -2.0 \ -2.0]$
861.  $[0.0 \ -3.0 \ -1.0] \cdot [-4.0 \ 2.0 \ -1.0]$
862.  $[1.0 \ -5.0 \ -5.0] \cdot [2.0 \ 1.0 \ -4.0]$
863. normalize  $[-2.0 \ 3.0 \ 2.0]$
864.  $[-1.0 \ -2.0 \ -5.0] \times [1.0 \ -3.0 \ -5.0]$
865. What is the relationship between the following two vectors?  $[-3.0 \ -2.0 \ 3.0]$ ,  $[1.0 \ 0.0 \ -2.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
866. What is the vector from  $[2.0 \ 2.0 \ 0.0]$  to  $[2.0 \ -4.0 \ 1.0]$ ?
867. What is the vector from  $[-1.0 \ 0.0 \ -5.0]$  to  $[-2.0 \ 4.0 \ 1.0]$ ?
868.  $\|[2.0 \ -5.0 \ 3.0]\|$
869. What is the angle between the following two vectors (in radians)?  $[-5.0 \ -1.0 \ 4.0]$ ,  $[4.0 \ -3.0 \ -3.0]$
870. What is the relationship between the following two vectors?  $[4.0 \ -1.0 \ -1.0]$ ,  $[-5.0 \ -1.0 \ -3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
871.  $\|[1.0 \ -4.0 \ 3.0]\|$
872.  $[2.0 \ -2.0 \ -2.0] \cdot [-3.0 \ 2.0 \ 0.0]$
873. What is the angle between the following two vectors (in radians)?  $[0.0 \ 2.0 \ -3.0]$ ,  $[3.0 \ 2.0 \ 4.0]$
874. What is the angle between the following two vectors (in radians)?  $[0.0 \ 0.0 \ 3.0]$ ,  $[1.0 \ -5.0 \ -2.0]$
875. normalize  $[-1.0 \ 2.0 \ 0.0]$
876. What is the relationship between the following two vectors?  $[3.0 \ 1.0 \ 2.0]$ ,  $[-5.0 \ 1.0 \ -3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
877. normalize  $[-3.0 \ 0.0 \ 3.0]$
878.  $[4.0 \ -3.0 \ 0.0] \cdot [0.0 \ 3.0 \ -5.0]$
879.  $[-3.0 \ -5.0 \ 0.0] + [-5.0 \ -3.0 \ -3.0]$
880.  $[-4.0 \ 4.0 \ 1.0] \cdot [-4.0 \ 1.0 \ 0.0]$
881.  $[-2.0 \ 1.0 \ 2.0] + [3.0 \ 3.0 \ -2.0]$

882. normalize  $[2.0 \quad -5.0 \quad 0.0]$
883. What is the relationship between the following two vectors?  $[2.0 \quad 4.0 \quad 4.0]$ ,  $[-4.0 \quad 2.0 \quad 4.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
884.  $[-4.0 \quad 3.0 \quad -3.0] \times [-1.0 \quad -5.0 \quad 0.0]$
885. What is the relationship between the following two vectors?  $[2.0 \quad -3.0 \quad 0.0]$ ,  $[1.0 \quad -3.0 \quad -3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
886.  $[4.0 \quad -1.0 \quad 3.0] \times [3.0 \quad -1.0 \quad 4.0]$
887.  $[-3.0 \quad 2.0 \quad -5.0] + [2.0 \quad 3.0 \quad -2.0]$
888.  $[-1.0 \quad -2.0 \quad 0.0] \cdot [1.0 \quad 0.0 \quad 1.0]$
889. What is the angle between the following two vectors (in radians)?  $[3.0 \quad 2.0 \quad 0.0]$ ,  $[-3.0 \quad 0.0 \quad -2.0]$
890.  $[-1.0 \quad -1.0 \quad -2.0] \cdot [0.0 \quad -2.0 \quad -4.0]$
891.  $[4.0 \quad 1.0 \quad -1.0] \cdot [0.0 \quad 0.0 \quad -2.0]$
892.  $[0.0 \quad 1.0 \quad 4.0] + [-4.0 \quad 3.0 \quad 4.0]$
893. What is the angle between the following two vectors (in radians)?  $[2.0 \quad -1.0 \quad -4.0]$ ,  $[1.0 \quad 4.0 \quad 4.0]$
894. What is the angle between the following two vectors (in radians)?  $[-3.0 \quad 2.0 \quad -1.0]$ ,  $[-1.0 \quad -4.0 \quad -4.0]$
895. What is the angle between the following two vectors (in radians)?  $[-1.0 \quad 2.0 \quad 4.0]$ ,  $[0.0 \quad -3.0 \quad 1.0]$
896. normalize  $[0.0 \quad 4.0 \quad -4.0]$
897.  $||[-1.0 \quad -4.0 \quad 1.0]||$
898.  $[1.0 \quad 2.0 \quad -5.0] \cdot [-1.0 \quad 1.0 \quad -5.0]$
899.  $[0.0 \quad -1.0 \quad 1.0] \cdot [0.0 \quad 0.0 \quad -4.0]$
900.  $[2.0 \quad 0.0 \quad 0.0] + [0.0 \quad -2.0 \quad 2.0]$
901.  $[-3.0 \quad -1.0 \quad -3.0] + [3.0 \quad 2.0 \quad -1.0]$
902. What is the angle between the following two vectors (in radians)?  $[4.0 \quad -4.0 \quad 0.0]$ ,  $[-3.0 \quad 2.0 \quad -1.0]$
903. What is the relationship between the following two vectors?  $[3.0 \quad 0.0 \quad 3.0]$ ,  $[-2.0 \quad -3.0 \quad -1.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
904. What is the angle between the following two vectors (in radians)?  $[-3.0 \quad -5.0 \quad 4.0]$ ,  $[2.0 \quad 3.0 \quad -3.0]$
905. What is the angle between the following two vectors (in radians)?  $[-2.0 \quad 4.0 \quad 2.0]$ ,  $[3.0 \quad 2.0 \quad 1.0]$
906.  $[4.0 \quad 1.0 \quad -2.0] + [-2.0 \quad 0.0 \quad 3.0]$

907. What is the relationship between the following two vectors?  $[0.0 \ 2.0 \ -2.0]$ ,  $[-3.0 \ 4.0 \ 2.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
908.  $||[1.0 \ -1.0 \ 4.0]||$
909. What is the vector from  $[-1.0 \ -3.0 \ -2.0]$  to  $[4.0 \ -1.0 \ -3.0]$ ?
910.  $||[-3.0 \ -5.0 \ 3.0]||$
911.  $[0.0 \ -1.0 \ 1.0] \times [-5.0 \ 2.0 \ -2.0]$
912.  $||[-3.0 \ 1.0 \ -3.0]||$
913.  $[3.0 \ 1.0 \ -5.0] \cdot [2.0 \ 0.0 \ 4.0]$
914. What is the relationship between the following two vectors?  $[0.0 \ 1.0 \ 2.0]$ ,  $[-3.0 \ 3.0 \ -2.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
915. What is the vector from  $[-2.0 \ 0.0 \ 3.0]$  to  $[-4.0 \ -4.0 \ -1.0]$ ?
916.  $[-4.0 \ -2.0 \ -2.0] \times [1.0 \ -2.0 \ -3.0]$
917.  $[0.0 \ -4.0 \ -5.0] \cdot [4.0 \ 0.0 \ 2.0]$
918. normalize  $[-5.0 \ 0.0 \ 4.0]$
919.  $[3.0 \ -2.0 \ 2.0] \times [3.0 \ 4.0 \ 0.0]$
920.  $||[0.0 \ -5.0 \ -4.0]||$
921.  $[1.0 \ -4.0 \ 3.0] \cdot [4.0 \ -3.0 \ -1.0]$
922. What is the angle between the following two vectors (in radians)?  $[-2.0 \ -1.0 \ 1.0]$ ,  $[0.0 \ -5.0 \ -5.0]$
923.  $[4.0 \ -2.0 \ 3.0] \times [-4.0 \ 2.0 \ -4.0]$
924. What is the relationship between the following two vectors?  $[3.0 \ 4.0 \ 3.0]$ ,  $[3.0 \ 1.0 \ 1.0]$  a)  
They point in the same direction b) they point in opposite directions c) they are perpendicular
925.  $[0.0 \ 2.0 \ -3.0] \cdot [-3.0 \ -1.0 \ -5.0]$
926. What is the vector from  $[-3.0 \ -4.0 \ -4.0]$  to  $[1.0 \ -1.0 \ 0.0]$ ?
927.  $[1.0 \ -2.0 \ -2.0] \cdot [1.0 \ 2.0 \ 0.0]$
928.  $||[-2.0 \ 1.0 \ -3.0]||$
929.  $[-1.0 \ 3.0 \ -2.0] \times [2.0 \ -1.0 \ 3.0]$
930.  $[-3.0 \ -2.0 \ -2.0] \cdot [0.0 \ 4.0 \ -1.0]$
931.  $[4.0 \ 4.0 \ -3.0] + [-2.0 \ 4.0 \ 0.0]$
932.  $[-5.0 \ 1.0 \ -4.0] \times [-3.0 \ -1.0 \ 1.0]$

933. normalize  $[3.0 \ 4.0 \ 2.0]$
934. normalize  $[-5.0 \ -2.0 \ -4.0]$
935.  $[4.0 \ -4.0 \ -3.0] + [0.0 \ 2.0 \ 1.0]$
936. What is the relationship between the following two vectors?  $[0.0 \ 0.0 \ 0.0]$ ,  $[3.0 \ -2.0 \ -2.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
937. normalize  $[-2.0 \ -3.0 \ -3.0]$
938.  $[-3.0 \ -3.0 \ 2.0] + [4.0 \ 1.0 \ 3.0]$
939.  $[4.0 \ -5.0 \ -5.0] \cdot [2.0 \ 3.0 \ -2.0]$
940.  $[2.0 \ 0.0 \ 0.0] \times [0.0 \ -5.0 \ 1.0]$
941. What is the relationship between the following two vectors?  $[-4.0 \ -4.0 \ -2.0]$ ,  $[-1.0 \ -1.0 \ 3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
942.  $[1.0 \ 2.0 \ 2.0] \times [-1.0 \ -5.0 \ -3.0]$
943.  $[3.0 \ 3.0 \ -5.0] + [3.0 \ 3.0 \ 1.0]$
944. What is the relationship between the following two vectors?  $[3.0 \ -3.0 \ -4.0]$ ,  $[3.0 \ -5.0 \ -5.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
945.  $[-2.0 \ -3.0 \ -3.0] \times [-3.0 \ -4.0 \ -5.0]$
946.  $[-2.0 \ -3.0 \ 0.0] \times [4.0 \ -5.0 \ 1.0]$
947.  $[1.0 \ -4.0 \ 4.0] \cdot [-4.0 \ -4.0 \ -5.0]$
948. What is the vector from  $[4.0 \ -2.0 \ 3.0]$  to  $[-1.0 \ -2.0 \ 1.0]$ ?
949. What is the relationship between the following two vectors?  $[-4.0 \ -3.0 \ 1.0]$ ,  $[-4.0 \ 3.0 \ 3.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
950.  $||[0.0 \ -5.0 \ 3.0]||$
951. What is the vector from  $[-5.0 \ 2.0 \ -5.0]$  to  $[3.0 \ 2.0 \ 2.0]$ ?
952. What is the vector from  $[-4.0 \ -2.0 \ 3.0]$  to  $[4.0 \ -1.0 \ -1.0]$ ?
953.  $[-5.0 \ -1.0 \ 2.0] \cdot [0.0 \ 3.0 \ 4.0]$
954. What is the relationship between the following two vectors?  $[-4.0 \ 0.0 \ -5.0]$ ,  $[0.0 \ -1.0 \ -5.0]$   
 a) They point in the same direction b) they point in opposite directions c) they are perpendicular
955.  $[-2.0 \ 3.0 \ -4.0] \times [-4.0 \ -3.0 \ -3.0]$

956. What is the relationship between the following two vectors?  $[4.0 \ 3.0 \ 0.0]$ ,  $[2.0 \ 4.0 \ -4.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
957.  $||[-2.0 \ 2.0 \ -3.0]||$
958. What is the angle between the following two vectors (in radians)?  $[-3.0 \ -5.0 \ -5.0]$ ,  $[-1.0 \ -3.0 \ 0.0]$
959.  $[2.0 \ 0.0 \ 0.0] \cdot [-4.0 \ -3.0 \ -1.0]$
960. normalize  $[-2.0 \ -5.0 \ 2.0]$
961.  $[-2.0 \ 3.0 \ 3.0] + [-1.0 \ -1.0 \ 1.0]$
962.  $[1.0 \ -3.0 \ -4.0] \cdot [-5.0 \ 1.0 \ 4.0]$
963. What is the relationship between the following two vectors?  $[-5.0 \ 4.0 \ 0.0]$ ,  $[4.0 \ 1.0 \ 3.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
964. What is the vector from  $[0.0 \ -5.0 \ 4.0]$  to  $[3.0 \ 3.0 \ -3.0]$ ?
965.  $[-1.0 \ 4.0 \ -1.0] \times [0.0 \ -3.0 \ -1.0]$
966. What is the vector from  $[-1.0 \ 0.0 \ -2.0]$  to  $[2.0 \ 1.0 \ 0.0]$ ?
967.  $[1.0 \ 1.0 \ -4.0] \times [0.0 \ -1.0 \ 0.0]$
968. What is the vector from  $[4.0 \ -4.0 \ -2.0]$  to  $[-3.0 \ 2.0 \ 1.0]$ ?
969.  $[-2.0 \ -4.0 \ 2.0] \cdot [-5.0 \ -2.0 \ -1.0]$
970. What is the angle between the following two vectors (in radians)?  $[0.0 \ -4.0 \ -4.0]$ ,  $[-3.0 \ -5.0 \ 2.0]$
971. What is the relationship between the following two vectors?  $[0.0 \ -3.0 \ 3.0]$ ,  $[-1.0 \ 2.0 \ -3.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
972.  $[1.0 \ 1.0 \ 4.0] \cdot [4.0 \ 1.0 \ 2.0]$
973.  $||[3.0 \ -3.0 \ -2.0]||$
974.  $[2.0 \ -4.0 \ 0.0] \cdot [-1.0 \ 0.0 \ 2.0]$
975.  $[-4.0 \ -4.0 \ 2.0] + [-3.0 \ 2.0 \ 0.0]$
976. What is the relationship between the following two vectors?  $[4.0 \ 0.0 \ 0.0]$ ,  $[-4.0 \ 0.0 \ 0.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
977. What is the angle between the following two vectors (in radians)?  $[3.0 \ 4.0 \ -5.0]$ ,  $[-5.0 \ -2.0 \ -4.0]$
978.  $||[3.0 \ -3.0 \ 1.0]||$
979.  $[-5.0 \ -5.0 \ -5.0] \times [2.0 \ -4.0 \ -4.0]$

980. What is the relationship between the following two vectors?  $[1.0 \ -3.0 \ 0.0]$ ,  $[3.0 \ 1.0 \ 1.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
981. What is the vector from  $[-1.0 \ 3.0 \ -4.0]$  to  $[3.0 \ 2.0 \ 3.0]$ ?
982.  $||[-3.0 \ -5.0 \ 0.0]||$
983. What is the relationship between the following two vectors?  $[-2.0 \ 2.0 \ 2.0]$ ,  $[-5.0 \ 3.0 \ -5.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
984. What is the vector from  $[-4.0 \ -2.0 \ -4.0]$  to  $[2.0 \ 1.0 \ 1.0]$ ?
985.  $||[3.0 \ 3.0 \ 1.0]||$
986.  $||[1.0 \ 4.0 \ 0.0]||$
987. normalize  $[-4.0 \ 0.0 \ -2.0]$
988.  $[-2.0 \ -4.0 \ 3.0] + [-1.0 \ 4.0 \ -5.0]$
989. What is the relationship between the following two vectors?  $[0.0 \ -1.0 \ -2.0]$ ,  $[-1.0 \ 2.0 \ 1.0]$   
a) They point in the same direction b) they point in opposite directions c) they are perpendicular
990. What is the angle between the following two vectors (in radians)?  $[2.0 \ 3.0 \ -5.0]$ ,  $[4.0 \ -1.0 \ -1.0]$
991. normalize  $[3.0 \ 1.0 \ -5.0]$
992.  $||[2.0 \ 1.0 \ 0.0]||$
993. normalize  $[-1.0 \ -1.0 \ 4.0]$
994.  $[1.0 \ -2.0 \ 2.0] \cdot [-4.0 \ 0.0 \ 0.0]$
995. normalize  $[-3.0 \ -1.0 \ 3.0]$
996.  $[-3.0 \ 3.0 \ -5.0] \cdot [1.0 \ 0.0 \ 0.0]$
997. What is the angle between the following two vectors (in radians)?  $[3.0 \ 4.0 \ 0.0]$ ,  $[2.0 \ 4.0 \ -3.0]$
998.  $[-4.0 \ -1.0 \ 0.0] \times [2.0 \ -1.0 \ -3.0]$
999.  $[2.0 \ -1.0 \ -2.0] \cdot [-5.0 \ -3.0 \ -1.0]$
1000.  $[3.0 \ -5.0 \ -3.0] \times [-3.0 \ 3.0 \ 3.0]$