

Each of the following complex numbers is given in Exponential form. Convert them into Cartesian form.

1. $\frac{2}{3}e^{\frac{\pi}{3}i}$
2. $\frac{47\sqrt{2}}{6}e^{\frac{7\pi}{4}i}$
3. $\frac{16\sqrt{2}}{3}e^{\frac{\pi}{4}i}$
4. $20e^{\frac{4\pi}{3}i}$
5. $19e^{\frac{5\pi}{3}i}$
6. $\frac{20}{7}e^{\frac{11\pi}{6}i}$
7. $\frac{12}{7}e^{\frac{5\pi}{6}i}$
8. $\frac{23\sqrt{2}}{5}e^{\frac{\pi}{4}i}$
9. $\frac{41}{4}e^{\frac{7\pi}{6}i}$
10. $26e^{\frac{5\pi}{6}i}$
11. $2e^{\frac{7\pi}{6}i}$
12. $\frac{31}{2}e^{\frac{2\pi}{3}i}$
13. $8e^{\frac{11\pi}{6}i}$
14. $\frac{3\sqrt{2}}{7}e^{\frac{\pi}{4}i}$
15. $40\sqrt{2}e^{\frac{3\pi}{4}i}$
16. $\frac{32}{5}e^{\frac{4\pi}{3}i}$
17. $\frac{100}{9}e^{\frac{2\pi}{3}i}$
18. $\frac{80}{7}e^{\frac{\pi}{3}i}$
19. $4\sqrt{2}e^{\frac{\pi}{4}i}$
20. $\frac{29}{4}e^{\frac{7\pi}{6}i}$
21. $18e^{\frac{\pi}{6}i}$
22. $\frac{7\sqrt{2}}{4}e^{\frac{5\pi}{4}i}$
23. $\frac{33\sqrt{2}}{5}e^{\frac{7\pi}{4}i}$
24. $\frac{35}{2}e^{\frac{5\pi}{6}i}$
25. $\frac{64}{5}e^{\frac{\pi}{3}i}$
26. $10\sqrt{2}e^{\frac{5\pi}{4}i}$
27. $\frac{19}{2}e^{\frac{\pi}{3}i}$
28. $\frac{43}{4}e^{\frac{7\pi}{6}i}$
29. $\frac{5\sqrt{2}}{3}e^{\frac{3\pi}{4}i}$
30. $\frac{24}{5}e^{\frac{5\pi}{6}i}$
31. $\frac{21}{4}e^{\frac{5\pi}{3}i}$
32. $\frac{37\sqrt{2}}{9}e^{\frac{5\pi}{4}i}$
33. $\frac{48}{7}e^{\frac{\pi}{6}i}$
34. $\frac{13\sqrt{2}}{4}e^{\frac{7\pi}{4}i}$
35. $\frac{37\sqrt{2}}{3}e^{\frac{5\pi}{4}i}$
36. $\frac{86}{9}e^{\frac{4\pi}{3}i}$
37. $15e^{\frac{\pi}{3}i}$
38. $14e^{\frac{7\pi}{6}i}$
39. $\frac{21\sqrt{2}}{4}e^{\frac{3\pi}{4}i}$
40. $\frac{24}{5}e^{\frac{11\pi}{6}i}$
41. $\frac{8}{3}e^{\frac{2\pi}{3}i}$
42. $10e^{\frac{11\pi}{6}i}$
43. $\frac{1}{2}e^{\frac{\pi}{3}i}$
44. $\frac{1\sqrt{2}}{5}e^{\frac{3\pi}{4}i}$
45. $\frac{9}{4}e^{\frac{2\pi}{3}i}$
46. $16e^{\frac{11\pi}{6}i}$
47. $19e^{\frac{2\pi}{3}i}$
48. $\frac{19\sqrt{2}}{7}e^{\frac{3\pi}{4}i}$
49. $\frac{16}{3}e^{\frac{\pi}{6}i}$
50. $\frac{1\sqrt{2}}{7}e^{\frac{7\pi}{4}i}$
51. $34e^{\frac{4\pi}{3}i}$
52. $24e^{\frac{\pi}{6}i}$
53. $\frac{4\sqrt{2}}{3}e^{\frac{5\pi}{4}i}$
54. $58e^{\frac{5\pi}{3}i}$
55. $\frac{3\sqrt{2}}{5}e^{\frac{7\pi}{4}i}$
56. $\frac{43}{5}e^{\frac{11\pi}{6}i}$
57. $\frac{56}{5}e^{\frac{7\pi}{6}i}$
58. $36e^{\frac{5\pi}{6}i}$
59. $\frac{16}{9}e^{\frac{11\pi}{6}i}$
60. $82e^{\frac{2\pi}{3}i}$
61. $\frac{32}{3}e^{\frac{4\pi}{3}i}$
62. $\frac{22}{3}e^{\frac{11\pi}{6}i}$
63. $\frac{15\sqrt{2}}{8}e^{\frac{\pi}{4}i}$
64. $\frac{14}{3}e^{\frac{\pi}{3}i}$
65. $\frac{82}{3}e^{\frac{11\pi}{6}i}$
66. $\frac{5\sqrt{2}}{2}e^{\frac{7\pi}{4}i}$
67. $\frac{27}{2}e^{\frac{\pi}{3}i}$
68. $\frac{52}{5}e^{\frac{\pi}{6}i}$
69. $24e^{\frac{\pi}{3}i}$
70. $7\sqrt{2}e^{\frac{5\pi}{4}i}$
71. $\frac{19}{5}e^{\frac{5\pi}{3}i}$
72. $\frac{2}{3}e^{\frac{5\pi}{3}i}$
73. $35e^{\frac{\pi}{3}i}$
74. $\frac{17\sqrt{2}}{3}e^{\frac{7\pi}{4}i}$
75. $\frac{26}{3}e^{\frac{\pi}{3}i}$
76. $\frac{32\sqrt{2}}{7}e^{\frac{5\pi}{4}i}$
77. $\frac{44\sqrt{2}}{5}e^{\frac{5\pi}{4}i}$
78. $\frac{86}{5}e^{\frac{7\pi}{6}i}$
79. $\frac{17}{4}e^{\frac{4\pi}{3}i}$
80. $\frac{46}{3}e^{\frac{4\pi}{3}i}$
81. $10e^{\frac{5\pi}{3}i}$
82. $46e^{\frac{\pi}{6}i}$
83. $\frac{80}{7}e^{\frac{2\pi}{3}i}$
84. $\frac{13\sqrt{2}}{9}e^{\frac{5\pi}{4}i}$
85. $7e^{\frac{5\pi}{6}i}$
86. $\frac{52}{3}e^{\frac{4\pi}{3}i}$
87. $\frac{86}{9}e^{\frac{11\pi}{6}i}$
88. $\frac{47\sqrt{2}}{6}e^{\frac{5\pi}{4}i}$
89. $\frac{25\sqrt{2}}{7}e^{\frac{3\pi}{4}i}$
90. $14e^{\frac{4\pi}{3}i}$
91. $\frac{15}{4}e^{\frac{5\pi}{3}i}$
92. $15e^{\frac{5\pi}{3}i}$
93. $\frac{64}{9}e^{\frac{4\pi}{3}i}$
94. $9e^{\frac{7\pi}{6}i}$
95. $13e^{\frac{7\pi}{6}i}$
96. $\frac{44}{3}e^{\frac{5\pi}{6}i}$
97. $5\sqrt{2}e^{\frac{5\pi}{4}i}$
98. $\frac{7\sqrt{2}}{2}e^{\frac{7\pi}{4}i}$
99. $4e^{\frac{\pi}{6}i}$
100. $6e^{\frac{11\pi}{6}i}$
101. $\frac{37\sqrt{2}}{2}e^{\frac{7\pi}{4}i}$
102. $\frac{26}{5}e^{\frac{\pi}{6}i}$
103. $\frac{38}{3}e^{\frac{\pi}{3}i}$
104. $4e^{\frac{5\pi}{3}i}$
105. $3\sqrt{2}e^{\frac{3\pi}{4}i}$
106. $\frac{29}{5}e^{\frac{5\pi}{3}i}$
107. $\frac{7\sqrt{2}}{3}e^{\frac{\pi}{4}i}$
108. $12e^{\frac{2\pi}{3}i}$
109. $\frac{32}{3}e^{\frac{\pi}{3}i}$
110. $\frac{10\sqrt{2}}{9}e^{\frac{7\pi}{4}i}$
111. $\frac{31}{3}e^{\frac{5\pi}{3}i}$
112. $8e^{\frac{\pi}{3}i}$
113. $20e^{\frac{2\pi}{3}i}$
114. $\frac{86}{7}e^{\frac{2\pi}{3}i}$
115. $\frac{21}{2}e^{\frac{4\pi}{3}i}$
116. $\frac{4}{9}e^{\frac{5\pi}{3}i}$
117. $\frac{8\sqrt{2}}{7}e^{\frac{5\pi}{4}i}$
118. $\frac{41}{4}e^{\frac{\pi}{3}i}$
119. $12e^{\frac{7\pi}{6}i}$
120. $\frac{13\sqrt{2}}{9}e^{\frac{7\pi}{4}i}$
121. $\frac{2\sqrt{2}}{3}e^{\frac{7\pi}{4}i}$
122. $\frac{78}{7}e^{\frac{5\pi}{3}i}$
123. $\frac{43\sqrt{2}}{3}e^{\frac{\pi}{4}i}$
124. $\frac{24}{5}e^{\frac{\pi}{3}i}$
125. $\frac{18}{5}e^{\frac{7\pi}{6}i}$
126. $\frac{66}{5}e^{\frac{5\pi}{3}i}$
127. $2\sqrt{2}e^{\frac{\pi}{4}i}$
128. $26e^{\frac{\pi}{3}i}$
129. $\frac{5}{4}e^{\frac{4\pi}{3}i}$
130. $\frac{22}{3}e^{\frac{2\pi}{3}i}$
131. $\frac{33\sqrt{2}}{4}e^{\frac{7\pi}{4}i}$
132. $38e^{\frac{2\pi}{3}i}$
133. $\frac{74}{5}e^{\frac{5\pi}{3}i}$
134. $14\sqrt{2}e^{\frac{3\pi}{4}i}$
135. $32e^{\frac{\pi}{6}i}$
136. $\frac{25\sqrt{2}}{9}e^{\frac{3\pi}{4}i}$
137. $5\sqrt{2}e^{\frac{7\pi}{4}i}$
138. $19\sqrt{2}e^{\frac{3\pi}{4}i}$
139. $10e^{\frac{2\pi}{3}i}$
140. $16\sqrt{2}e^{\frac{7\pi}{4}i}$
141. $3e^{\frac{7\pi}{6}i}$
142. $\frac{14}{3}e^{\frac{\pi}{6}i}$
143. $\frac{3\sqrt{2}}{2}e^{\frac{\pi}{4}i}$
144. $\frac{44}{5}e^{\frac{11\pi}{6}i}$
145. $1\sqrt{2}e^{\frac{3\pi}{4}i}$
146. $\frac{58}{5}e^{\frac{5\pi}{6}i}$
147. $\frac{32}{3}e^{\frac{5\pi}{6}i}$
148. $18e^{\frac{5\pi}{3}i}$
149. $37\sqrt{2}e^{\frac{3\pi}{4}i}$
150. $1e^{\frac{\pi}{6}i}$
151. $\frac{35\sqrt{2}}{4}e^{\frac{5\pi}{4}i}$
152. $\frac{7}{5}e^{\frac{7\pi}{6}i}$
153. $10e^{\frac{5\pi}{6}i}$
154. $\frac{35}{2}e^{\frac{5\pi}{3}i}$
155. $\frac{21}{2}e^{\frac{7\pi}{6}i}$
156. $\frac{40}{3}e^{\frac{\pi}{6}i}$
157. $\frac{98}{3}e^{\frac{5\pi}{6}i}$
158. $\frac{21}{2}e^{\frac{\pi}{6}i}$
159. $\frac{3\sqrt{2}}{2}e^{\frac{3\pi}{4}i}$
160. $52e^{\frac{\pi}{3}i}$
161. $39e^{\frac{\pi}{3}i}$
162. $86e^{\frac{2\pi}{3}i}$
163. $\frac{28}{5}e^{\frac{7\pi}{6}i}$
164. $4e^{\frac{4\pi}{3}i}$
165. $\frac{8}{7}e^{\frac{2\pi}{3}i}$
166. $9e^{\frac{2\pi}{3}i}$
167. $\frac{23}{2}e^{\frac{\pi}{6}i}$
168. $\frac{22}{3}e^{\frac{4\pi}{3}i}$
169. $\frac{13}{5}e^{\frac{11\pi}{6}i}$
170. $\frac{1\sqrt{2}}{5}e^{\frac{7\pi}{4}i}$
171. $\frac{14}{3}e^{\frac{11\pi}{6}i}$
172. $\frac{27}{2}e^{\frac{\pi}{3}i}$
173. $\frac{8\sqrt{2}}{3}e^{\frac{3\pi}{4}i}$
174. $\frac{49}{2}e^{\frac{\pi}{3}i}$
175. $23\sqrt{2}e^{\frac{3\pi}{4}i}$
176. $\frac{80}{3}e^{\frac{5\pi}{3}i}$
177. $36e^{\frac{7\pi}{6}i}$
178. $9e^{\frac{11\pi}{6}i}$
179. $48e^{\frac{11\pi}{6}i}$
180. $\frac{5\sqrt{2}}{4}e^{\frac{\pi}{4}i}$

Solutions:

1. $\frac{1}{3} + \frac{\sqrt{3}}{3}i$
2. $\frac{47}{6} - \frac{47}{6}i$
3. $\frac{16}{3} + \frac{16}{3}i$
4. $-10 - i10\sqrt{3}$
5. $\frac{19}{2} - \frac{19\sqrt{3}}{2}i$
6. $\frac{10\sqrt{3}}{7} - \frac{10}{7}i$
7. $\frac{-6\sqrt{3}}{7} + \frac{6}{7}i$
8. $\frac{23}{5} + \frac{23}{5}i$
9. $\frac{-41\sqrt{3}}{8} - \frac{41}{8}i$
10. $-13\sqrt{3} + 13i$
11. $-\sqrt{3} - i$
12. $\frac{-31}{4} + \frac{31\sqrt{3}}{4}i$
13. $4\sqrt{3} - 4i$
14. $\frac{3}{7} + \frac{3}{7}i$
15. $-40 + 40i$
16. $\frac{-16}{5} - \frac{16\sqrt{3}}{5}i$
17. $\frac{-50}{9} + \frac{50\sqrt{3}}{9}i$
18. $\frac{40}{7} + \frac{40\sqrt{3}}{7}i$
19. $4 + 4i$
20. $\frac{-29\sqrt{3}}{8} - \frac{29}{8}i$
21. $9\sqrt{3} + 9i$
22. $\frac{-7}{4} - \frac{7}{4}i$
23. $\frac{33}{5} - \frac{33}{5}i$
24. $\frac{-35\sqrt{3}}{4} + \frac{35}{4}i$
25. $\frac{32}{5} + \frac{32\sqrt{3}}{5}i$
26. $-10 - 10i$
27. $\frac{19}{4} + \frac{19\sqrt{3}}{4}i$
28. $\frac{-43\sqrt{3}}{8} - \frac{43}{8}i$
29. $\frac{-5}{3} + \frac{5}{3}i$
30. $\frac{-12\sqrt{3}}{5} + \frac{12}{5}i$
31. $\frac{21}{8} - \frac{21\sqrt{3}}{8}i$
32. $\frac{-37}{9} - \frac{37}{9}i$
33. $\frac{24\sqrt{3}}{7} + \frac{24}{7}i$
34. $\frac{13}{4} - \frac{13}{4}i$
35. $\frac{-37}{3} - \frac{37}{3}i$
36. $\frac{-43}{9} - \frac{43\sqrt{3}}{9}i$
37. $\frac{15}{2} + \frac{15\sqrt{3}}{2}i$
38. $-7\sqrt{3} - 7i$
39. $\frac{-21}{4} + \frac{21}{4}i$
40. $\frac{12\sqrt{3}}{5} - \frac{12}{5}i$
41. $\frac{-4}{3} + \frac{4\sqrt{3}}{3}i$
42. $5\sqrt{3} - 5i$
43. $\frac{1}{4} + \frac{\sqrt{3}}{4}i$
44. $\frac{-1}{5} + \frac{1}{5}i$
45. $\frac{-9}{8} + \frac{9\sqrt{3}}{8}i$
46. $8\sqrt{3} - 8i$
47. $\frac{-19}{2} + \frac{19\sqrt{3}}{2}i$
48. $\frac{-19}{7} + \frac{19}{7}i$
49. $\frac{8\sqrt{3}}{3} + \frac{8}{3}i$
50. $\frac{1}{7} - \frac{1}{7}i$
51. $-17 - i17\sqrt{3}$
52. $12\sqrt{3} + 12i$
53. $\frac{-4}{3} - \frac{4}{3}i$
54. $29 - i29\sqrt{3}$
55. $\frac{3}{5} - \frac{3}{5}i$
56. $\frac{43\sqrt{3}}{10} - \frac{43}{10}i$
57. $\frac{-28\sqrt{3}}{5} - \frac{28}{5}i$
58. $-18\sqrt{3} + 18i$
59. $\frac{8\sqrt{3}}{9} - \frac{8}{9}i$
60. $-41 + i41\sqrt{3}$
61. $\frac{-16}{3} - \frac{16\sqrt{3}}{3}i$
62. $\frac{11\sqrt{3}}{3} - \frac{11}{3}i$
63. $\frac{15}{8} + \frac{15}{8}i$
64. $\frac{7}{3} + \frac{7\sqrt{3}}{3}i$
65. $\frac{41\sqrt{3}}{3} - \frac{41}{3}i$
66. $\frac{5}{2} - \frac{5}{2}i$
67. $\frac{11}{7} + \frac{11\sqrt{3}}{7}i$
68. $\frac{26\sqrt{3}}{5} + \frac{26}{5}i$
69. $12 + i12\sqrt{3}$
70. $-7 - 7i$
71. $\frac{19}{10} - \frac{19\sqrt{3}}{10}i$
72. $\frac{1}{3} - \frac{\sqrt{3}}{3}i$
73. $\frac{35}{2} + \frac{35\sqrt{3}}{2}i$
74. $\frac{17}{3} - \frac{17}{3}i$
75. $\frac{13}{3} + \frac{13\sqrt{3}}{3}i$
76. $\frac{-32}{7} - \frac{32}{7}i$
77. $\frac{-44}{5} - \frac{44}{5}i$
78. $\frac{-43\sqrt{3}}{5} - \frac{43}{5}i$
79. $\frac{-17}{8} - \frac{17\sqrt{3}}{8}i$
80. $\frac{-23}{3} - \frac{23\sqrt{3}}{3}i$
81. $5 - i5\sqrt{3}$
82. $23\sqrt{3} + 23i$
83. $\frac{-40}{7} + \frac{40\sqrt{3}}{7}i$
84. $\frac{-13}{9} - \frac{13}{9}i$
85. $\frac{-7\sqrt{3}}{2} + \frac{7}{2}i$
86. $\frac{-26}{3} - \frac{26\sqrt{3}}{3}i$
87. $\frac{43\sqrt{3}}{9} - \frac{43}{9}i$
88. $\frac{-47}{6} - \frac{47}{6}i$
89. $\frac{-25}{7} + \frac{25}{7}i$
90. $-7 - i7\sqrt{3}$
91. $\frac{15}{8} - \frac{15\sqrt{3}}{8}i$
92. $\frac{15}{2} - \frac{15\sqrt{3}}{2}i$
93. $\frac{-32}{9} - \frac{32\sqrt{3}}{9}i$
94. $\frac{-9\sqrt{3}}{2} - \frac{9}{2}i$
95. $\frac{-13\sqrt{3}}{2} - \frac{13}{2}i$
96. $\frac{-22\sqrt{3}}{3} + \frac{22}{3}i$
97. $-5 - 5i$
98. $\frac{7}{2} - \frac{7}{2}i$
99. $2\sqrt{3} + 2i$
100. $3\sqrt{3} - 3i$
101. $\frac{37}{2} - \frac{37}{2}i$
102. $\frac{13\sqrt{3}}{5} + \frac{13}{5}i$
103. $\frac{19}{3} + \frac{19\sqrt{3}}{3}i$
104. $2 - i2\sqrt{3}$
105. $-3 + 3i$
106. $\frac{29}{10} - \frac{29\sqrt{3}}{10}i$
107. $\frac{7}{3} + \frac{7}{3}i$
108. $-6 + i6\sqrt{3}$
109. $\frac{16}{3} + \frac{16\sqrt{3}}{3}i$
110. $\frac{10}{9} - \frac{10}{9}i$
111. $\frac{31}{6} - \frac{31\sqrt{3}}{6}i$
112. $4 + i4\sqrt{3}$
113. $-10 + i10\sqrt{3}$
114. $\frac{-43}{7} + \frac{43\sqrt{3}}{7}i$
115. $\frac{-21}{4} - \frac{21\sqrt{3}}{4}i$
116. $\frac{2}{9} - \frac{2\sqrt{3}}{9}i$
117. $\frac{-8}{7} - \frac{8}{7}i$
118. $\frac{41}{8} + \frac{41\sqrt{3}}{8}i$
119. $-6\sqrt{3} - 6i$
120. $\frac{13}{9} - \frac{13}{9}i$
121. $\frac{2}{3} - \frac{2}{3}i$
122. $\frac{39}{7} - \frac{39\sqrt{3}}{7}i$
123. $\frac{43}{3} + \frac{43}{3}i$
124. $\frac{12}{5} + \frac{12\sqrt{3}}{5}i$
125. $\frac{-9\sqrt{3}}{5} - \frac{9}{5}i$
126. $\frac{33}{5} - \frac{33\sqrt{3}}{5}i$
127. $2 + 2i$
128. $13 + i13\sqrt{3}$
129. $\frac{-5}{8} - \frac{5\sqrt{3}}{8}i$
130. $\frac{-11}{3} + \frac{11\sqrt{3}}{3}i$
131. $\frac{33}{4} - \frac{33}{4}i$
132. $-19 + i19\sqrt{3}$
133. $\frac{37}{5} - \frac{37\sqrt{3}}{5}i$
134. $-14 + 14i$
135. $16\sqrt{3} + 16i$
136. $\frac{-25}{9} + \frac{25}{9}i$
137. $5 - 5i$
138. $-19 + 19i$
139. $-5 + i5\sqrt{3}$
140. $16 - 16i$
141. $\frac{-3\sqrt{3}}{2} - \frac{3}{2}i$
142. $\frac{7\sqrt{3}}{3} + \frac{7}{3}i$
143. $\frac{3}{2} + \frac{3}{2}i$
144. $\frac{22\sqrt{3}}{5} - \frac{22}{5}i$
145. $-1 + i$
146. $\frac{-29\sqrt{3}}{5} + \frac{29}{5}i$
147. $\frac{-16\sqrt{3}}{3} + \frac{16}{3}i$
148. $9 - i9\sqrt{3}$
149. $-37 + 37i$
150. $\frac{\sqrt{3}}{2} + \frac{1}{2}i$
151. $\frac{-35}{4} - \frac{35}{4}i$
152. $\frac{-7\sqrt{3}}{10} - \frac{7}{10}i$
153. $-5\sqrt{3} + 5i$
154. $\frac{35}{4} - \frac{35\sqrt{3}}{4}i$
155. $\frac{-21\sqrt{3}}{4} - \frac{21}{4}i$
156. $\frac{20\sqrt{3}}{3} + \frac{20}{3}i$
157. $\frac{-49\sqrt{3}}{3} + \frac{49}{3}i$
158. $\frac{21\sqrt{3}}{4} + \frac{21}{4}i$
159. $\frac{-3}{2} + \frac{3}{2}i$
160. $26 + i26\sqrt{3}$
161. $\frac{39}{2} + \frac{39\sqrt{3}}{2}i$
162. $-43 + i43\sqrt{3}$
163. $\frac{-14\sqrt{3}}{5} - \frac{14}{5}i$
164. $-2 - i2\sqrt{3}$
165. $\frac{-7}{4} + \frac{7\sqrt{3}}{4}i$
166. $\frac{-9}{2} + \frac{9\sqrt{3}}{2}i$
167. $\frac{23\sqrt{3}}{4} + \frac{23}{4}i$
168. $\frac{-11}{3} - \frac{11\sqrt{3}}{3}i$
169. $\frac{13\sqrt{3}}{10} - \frac{13}{10}i$
170. $\frac{1}{5} - \frac{1}{5}i$
171. $\frac{7\sqrt{3}}{3} - \frac{7}{3}i$
172. $\frac{27}{4} + \frac{27\sqrt{3}}{4}i$
173. $\frac{-8}{3} + \frac{8}{3}i$
174. $\frac{49}{4} + \frac{49\sqrt{3}}{4}i$
175. $-23 + 23i$
176. $\frac{40}{3} - \frac{40\sqrt{3}}{3}i$
177. $-18\sqrt{3} - 18i$
178. $\frac{9\sqrt{3}}{2} - \frac{9}{2}i$
179. $24\sqrt{3} - 24i$
180. $\frac{5}{4} + \frac{5}{4}i$