

# Celestial Sphere Models—Star Data

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Created: September 3, 2021

Last updated: September 6, 2021

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The number preceding the name of the star (or binary or multiple system of stars) refers to its approximate rank according to apparent brightness. A “v” following the apparent or absolute magnitude of a star (or system of stars) means that this value varies.

## Stars Sorted Alphabetically

151. Acamar  
Section 2  
RA 2h 58' 15.6792"  
Decl.  $-40^{\circ} 18' 16.8457''$   
Apparent magnitude: 2.88  
Absolute magnitude: -0.59  
Constellation: Eridanus

9. Achernar  
Section 2  
RA 1h 38' 24"  
Decl.  $-57^{\circ} 8' 36''$   
Apparent magnitude: 0.45  
Absolute magnitude: -2.77  
Constellation: Eridanus

22. Adhara  
Section 3  
RA 6h 59' 21.2"  
Decl.  $-28^{\circ} 59' 5''$   
Apparent magnitude: 1.5  
Absolute magnitude: -4.1  
Constellation: Canis Major

152. Albaldah  
Section 7  
RA 19h 10' 51.8"  
Decl.  $-20^{\circ} 59' 3''$   
Apparent magnitude: 2.88  
Absolute magnitude: -2.77  
Constellation: Sagittarius

157. Albireo  
Section 8  
RA 19h 31' 28.1"  
Decl.  $27^{\circ} 59' 5''$   
Apparent magnitude: 2.9  
Absolute magnitude: -2.31  
Constellation: Cygnus

143. Alcyone  
Section 2  
RA 3h 48' 35.3"  
Decl.  $24^{\circ} 9' 4''$   
Apparent magnitude: 2.85  
Absolute magnitude: -2.41  
Constellation: Taurus

14. Aldebaran  
Section 3  
RA 4h 36' 59.1"  
Decl.  $16^{\circ} 32' 4''$   
Apparent magnitude: 0.86v  
Absolute magnitude: -0.64v  
Constellation: Taurus

89. Alderamin  
Section 8  
RA 21h 19' 1.2"  
Decl.  $62^{\circ} 39' 5''$   
Apparent magnitude: 2.45  
Absolute magnitude: 1.58  
Constellation: Cepheus

58. Al Dhanab  
Section 1  
RA 22h 43' 45.8"  
Decl.  $-46^{\circ} 47' 14''$   
Apparent magnitude: 2.07v  
Absolute magnitude: 1.52  
Constellation: Grus

120. Aldhibain  
Section 6  
RA 16h 24' 14.7"  
Decl.  $61^{\circ} 28' 2''$   
Apparent magnitude: 2.73  
Absolute magnitude: 0.58  
Constellation: Draco

137. Algenib  
Section 1  
RA 0h 14' 11.4"  
Decl.  $15^{\circ} 17' 1''$   
Apparent magnitude: 2.83  
Absolute magnitude: -2.22  
Constellation: Pegasus

49. Algieba  
Section 4  
RA 10h 19' 58.3506"  
Decl.  $19^{\circ} 50' 29.3468''$   
Apparent magnitude: 2  
Absolute magnitude: -0.93  
Constellation: Leo

60. Algol  
Section 2  
RA 3h 9' 22.8"  
Decl.  $41^{\circ} 1' 3''$   
Apparent magnitude: 2.09  
Absolute magnitude: 0.18  
Constellation: Perseus

163. Algorel  
Section 5  
RA 12h 30' 49.4"  
Decl.  $-16^{\circ} 37' 0''$   
Apparent magnitude: 2.94  
Absolute magnitude: 0.79  
Constellation: Corvus

166. Alheka  
Section 3  
RA 5h 38' 45.1"  
Decl.  $21^{\circ} 9' 0''$   
Apparent magnitude: 2.97  
Absolute magnitude: -2.56  
Constellation: Taurus

43. Alhena  
Section 3  
RA 6h 38' 46.8"  
Decl.  $16^{\circ} 22' 5''$   
Apparent magnitude: 1.93  
Absolute magnitude: -0.6  
Constellation: Gemini

32. Alioth  
Section 5  
RA 12h 54' 50.3"  
Decl.  $55^{\circ} 51' 3''$   
Apparent magnitude: 1.77  
Absolute magnitude: -0.2  
Constellation: Ursa Major

38. Alkaid  
Section 6  
RA 13h 48' 16.1"  
Decl.  $49^{\circ} 13' 1''$   
Apparent magnitude: 1.86  
Absolute magnitude: -0.59  
Constellation: Ursa Major

181. Almaaz  
Section 3  
RA 5h 3' 18"  
Decl.  $43^{\circ} 50' 5''$   
Apparent magnitude: 3.03  
Absolute magnitude: -5.95  
Constellation: Auriga

61. Almach  
Section 2  
RA 2h 3' 53.9523"  
Decl.  $42^{\circ} 19' 47.0223''$   
Apparent magnitude: 2.1  
Absolute magnitude: -3.08  
Constellation: Andromeda

30. Alnair  
Section 8  
RA 22h 9' 23.4"  
Decl.  $-46^{\circ} 52' 14''$   
Apparent magnitude: 1.74  
Absolute magnitude: -0.72  
Constellation: Grus

168. Alnasl  
Section 7  
RA 18h 6' 59.8"  
Decl.  $-30^{\circ} 25' 2''$   
Apparent magnitude: 2.98  
Absolute magnitude: 0.63  
Constellation: Sagittarius

29. Alnilam  
Section 3  
RA 5h 37' 9.2"  
Decl.  $-1^{\circ} 11' 2''$   
Apparent magnitude: 1.69  
Absolute magnitude: -6.38  
Constellation: Orion

31. Alnitak  
Section 3  
RA 5h 41' 41.6"  
Decl.  $-1^{\circ} 56' 0''$   
Apparent magnitude: 1.75  
Absolute magnitude: -5.25  
Constellation: Orion

156. Alniyat  
Section 6  
RA 16h 22' 19"  
Decl.  $-25^{\circ} 38' 0''$   
Apparent magnitude: 2.9v  
Absolute magnitude: -3.86v  
Constellation: Scorpius

3.  $\alpha$  Centauri  
Section 6  
RA 14h 39' 35.0631"  
Decl.  $-60^{\circ} 50' 15.0992''$   
Apparent magnitude: -0.29  
Absolute magnitude: 4.06  
Constellation: Centaurus

146.  $\alpha$  Hydri  
Section 2  
RA 1h 59' 21.1"  
Decl.  $-61^{\circ} 28' 49''$   
Apparent magnitude: 2.86  
Absolute magnitude: 1.16  
Constellation: Hydrus

198.  $\alpha$  Lyncis  
Section 4  
RA 9h 22' 10.6"  
Decl.  $34^{\circ} 18' 4''$   
Apparent magnitude: 3.14  
Absolute magnitude: -1.02  
Constellation: Lynx

114.  $\alpha$  Muscæ  
Section 5  
RA 12h 38' 18.4"  
Decl.  $-69^{\circ} 14' 14''$   
Apparent magnitude: 2.69  
Absolute magnitude: -2.17  
Constellation: Musca

47. Alphard  
Section 4  
RA 9h 28' 29.8"  
Decl.  $-8^{\circ} 44' 2''$   
Apparent magnitude: 1.98  
Absolute magnitude: -1.7  
Constellation: Hydra

150.  $\alpha$  Tucanæ  
Section 8  
RA 22h 19' 45.2"  
Decl.  $-60^{\circ} 10' 0''$   
Apparent magnitude: 2.87  
Absolute magnitude: -1.05  
Constellation: Tucana

67. Alphecca  
Section 6  
RA 15h 35' 28.3"  
Decl.  $26^{\circ} 39' 1''$   
Apparent magnitude: 2.22  
Absolute magnitude: 0.42  
Constellation: Corona Borealis

54. Alpheratz  
Section 1  
RA 0h 9' 20.9"  
Decl.  $29^{\circ} 11' 3''$   
Apparent magnitude: 2.07  
Absolute magnitude: -0.3  
Constellation: Andromeda

12. Altair  
Section 8  
RA 19h 51' 41.1"  
Decl.  $8^{\circ} 55' 0''$   
Apparent magnitude: 0.77  
Absolute magnitude: 2.21  
Constellation: Aquila

88. Aludra  
Section 3  
RA 7h 24' 49.6"  
Decl.  $-29^{\circ} 20' 2''$   
Apparent magnitude: 2.45  
Absolute magnitude: -7.51  
Constellation: Canis Major

84. Ankaa  
Section 1  
RA 0h 27' 11.7"  
Decl.  $-42^{\circ} 12' 20''$   
Apparent magnitude: 2.4  
Absolute magnitude: 0.52  
Constellation: Phoenix

15. Antares  
Section 7  
RA 16h 30' 32.7"  
Decl.  $-26^{\circ} 28' 1''$   
Apparent magnitude: 0.95v  
Absolute magnitude: -5.39v  
Constellation: Scorpius

4. Arcturus  
Section 6  
RA 14h 16' 30.3"  
Decl.  $19^{\circ} 5' 1''$   
Apparent magnitude: -0.05  
Absolute magnitude: -0.31  
Constellation: Boötes

98. Arneb  
Section 3  
RA 5h 33' 32.8"  
Decl.  $-17^{\circ} 48' 3''$   
Apparent magnitude: 2.58  
Absolute magnitude: -5.4  
Constellation: Lepus

101. Ascella  
Section 7  
RA 19h 3' 47.2"  
Decl.  $-29^{\circ} 51' 0''$   
Apparent magnitude: 2.6  
Absolute magnitude: 0.42  
Constellation: Sagittarius

66. Aspidiske  
Section 4  
RA 9h 17' 35.1"  
Decl.  $-59^{\circ} 21' 12''$   
Apparent magnitude: 2.21v  
Absolute magnitude: -4.42  
Constellation: Carina

42. Atria  
Section 7  
RA 16h 48' 39.8951"  
Decl.  $-69^{\circ} 1' 39.7626''$   
Apparent magnitude: 1.92  
Absolute magnitude: -3.61  
Constellation: Triangulum Australe

40. Avior  
Section 4  
RA 8h 22' 53.5"  
Decl.  $-59^{\circ} 34' 10''$   
Apparent magnitude: 1.87  
Absolute magnitude: -4.57  
Constellation: Carina

26. Bellatrix  
Section 3  
RA 5h 26' 7.5"  
Decl.  $6^{\circ} 21' 5''$   
Apparent magnitude: 1.64  
Absolute magnitude: -2.72  
Constellation: Orion

141.  $\beta$  Aræ  
Section 7  
RA 17h 26' 50.5"  
Decl.  $-55^{\circ} 32' 43''$   
Apparent magnitude: 2.84  
Absolute magnitude: -3.49  
Constellation: Ara

134. $\beta$ Hydri Section 1 RA 0h 26' 41.9" Decl. $-77^{\circ} 9' 1''$ Apparent magnitude: 2.82 Absolute magnitude: 3.45 Constellation: Hydrus	23. Castor Section 4 RA 7h 34' 35.863" Decl. $31^{\circ} 53' 17.79''$ Apparent magnitude: 1.58 Absolute magnitude: 0.59 Constellation: Gemini	147. $\delta$ Cygni Section 8 RA 19h 45' 33.2" Decl. $45^{\circ} 10' 3''$ Apparent magnitude: 2.86 Absolute magnitude: -0.74 Constellation: Cygnus
182. $\beta$ Muscae Section 5 RA 12h 47' 26.1" Decl. $-68^{\circ} 12' 32''$ Apparent magnitude: 3.04 Absolute magnitude: -1.86 Constellation: Musca	125. Cebalrai Section 7 RA 17h 44' 23.2" Decl. $4^{\circ} 33' 3''$ Apparent magnitude: 2.76 Absolute magnitude: 0.76 Constellation: Ophiuchus	177. $\delta$ Persei Section 2 RA 3h 44' 15" Decl. $47^{\circ} 50' 4''$ Apparent magnitude: 3.01 Absolute magnitude: -3.04 Constellation: Perseus
139. $\beta$ Trianguli Australis Section 6 RA 15h 56' 47.3" Decl. $-63^{\circ} 29' 9''$ Apparent magnitude: 2.83 Absolute magnitude: 2.38 Constellation: Triangulum Australe	142. Choo Section 7 RA 17h 33' 16.4" Decl. $-49^{\circ} 53' 20''$ Apparent magnitude: 2.84 Absolute magnitude: -1.51 Constellation: Ara	145. Deneb Algedi Section 8 RA 21h 48' 3.6" Decl. $-16^{\circ} 2' 3''$ Apparent magnitude: 2.85 Absolute magnitude: 2.49 Constellation: Capricornus
172. $\beta$ Trianguli Section 2 RA 2h 10' 39.1" Decl. $35^{\circ} 4' 2''$ Apparent magnitude: 3 Absolute magnitude: 0.09 Constellation: Triangulum	63. Cih Section 1 RA 0h 57' 50.4" Decl. $60^{\circ} 48' 5''$ Apparent magnitude: 2.15v Absolute magnitude: -4.22 Constellation: Cassiopeia	171. Deneb el Okab Section 7 RA 19h 6' 15.6" Decl. $13^{\circ} 53' 3''$ Apparent magnitude: 2.99 Absolute magnitude: 0.96 Constellation: Aquila
10. Betelgeuse Section 3 RA 5h 56' 10.4" Decl. $7^{\circ} 24' 3''$ Apparent magnitude: 0.55v Absolute magnitude: -5.04v Constellation: Orion	130. Cor Caroli 2 Section 5 RA 12h 56' 1.66622" Decl. $38^{\circ} 19' 6.1541''$ Apparent magnitude: 2.98v Absolute magnitude: 0.16 Constellation: Canes Venatici	62. Denebola Section 5 RA 11h 50' 0.1" Decl. $14^{\circ} 28' 0''$ Apparent magnitude: 2.14 Absolute magnitude: 1.92 Constellation: Leo
2. Canopus Section 3 RA 6h 24' 21.8" Decl. $-52^{\circ} 42' 23''$ Apparent magnitude: -0.73 Absolute magnitude: -5.64 Constellation: Carina	184. Dabih Section 8 RA 20h 22' 2.9" Decl. $-14^{\circ} 43' 1''$ Apparent magnitude: 3.05 Absolute magnitude: -2.07 Constellation: Capricornus	19. Deneb Section 8 RA 20h 42' 3.8" Decl. $45^{\circ} 20' 5''$ Apparent magnitude: 1.24 Absolute magnitude: -8.74 Constellation: Cygnus
6. Capella Section 3 RA 5h 18' 3.5" Decl. $46^{\circ} 0' 5''$ Apparent magnitude: 0.07 Absolute magnitude: -0.49 Constellation: Auriga	99. $\delta$ Centauri Section 5 RA 12h 9' 19.5" Decl. $-50^{\circ} 49' 31''$ Apparent magnitude: 2.58v Absolute magnitude: -2.84 Constellation: Centaurus	51. Diphda Section 1 RA 0h 44' 31" Decl. $-17^{\circ} 53' 0''$ Apparent magnitude: 2.04 Absolute magnitude: -0.3 Constellation: Cetus
74. Caph Section 1 RA 0h 10' 10.6" Decl. $59^{\circ} 15' 0''$ Apparent magnitude: 2.28 Absolute magnitude: 1.17 Constellation: Cassiopeia	128. $\delta$ Crucis Section 5 RA 12h 16' 8.3" Decl. $-58^{\circ} 51' 6''$ Apparent magnitude: 2.79 Absolute magnitude: -2.45 Constellation: Crux	76. Dschubba Section 6 RA 16h 1' 25.8" Decl. $-22^{\circ} 40' 2''$ Apparent magnitude: 2.29 Absolute magnitude: -3.16 Constellation: Scorpius

34. Dubhe  
Section 5  
RA 11h 4' 51.2"  
Decl. 61° 39' 0"  
Apparent magnitude: 1.8  
Absolute magnitude: -1.09  
Constellation: Ursa Major

27. Elnath  
Section 3  
RA 5h 27' 27.8"  
Decl. 28° 37' 1"  
Apparent magnitude: 1.66  
Absolute magnitude: -1.36  
Constellation: Taurus

72. Eltanin  
Section 7  
RA 17h 57' 2.2"  
Decl. 51° 29' 1"  
Apparent magnitude: 2.24  
Absolute magnitude: -1.04  
Constellation: Draco

82. Enif  
Section 8  
RA 21h 45' 5.7"  
Decl. 9° 57' 3"  
Apparent magnitude: 2.38  
Absolute magnitude: -4.19  
Constellation: Pegasus

75.  $\epsilon$  Centauri  
Section 6  
RA 13h 41' 4.3"  
Decl. -53° 33' 35"  
Apparent magnitude: 2.29  
Absolute magnitude: -3.02  
Constellation: Centaurus

155.  $\epsilon$  Persei  
Section 2  
RA 3h 59' 6.1"  
Decl. 40° 3' 4"  
Apparent magnitude: 2.9  
Absolute magnitude: -3.19  
Constellation: Perseus

79.  $\eta$  Centauri  
Section 6  
RA 14h 36' 41.4"  
Decl. -42° 14' 17"  
Apparent magnitude: 2.33v  
Absolute magnitude: -2.55  
Constellation: Centaurus

188.  $\eta$  Sagittarii  
Section 7  
RA 18h 18' 52.7"  
Decl. -36° 45' 16"  
Apparent magnitude: 3.1  
Absolute magnitude: -0.2  
Constellation: Sagittarius

18. Fomalhaut  
Section 1  
RA 22h 57' 39.0465"  
Decl. -29° 37' 20.05"  
Apparent magnitude: 1.15  
Absolute magnitude: 1.72  
Constellation: Piscis Austrinus

25. Gacrux  
Section 5  
RA 12h 32' 12.2"  
Decl. -57° 13' 0"  
Apparent magnitude: 1.63  
Absolute magnitude: -0.52  
Constellation: Crux

176.  $\gamma$  Gruis  
Section 8  
RA 21h 55' 2.6"  
Decl. -37° 16' 37"  
Apparent magnitude: 3  
Absolute magnitude: -0.97  
Constellation: Grus

169.  $\gamma$  Hydræ  
Section 5  
RA 13h 19' 55.9"  
Decl. -23° 16' 0"  
Apparent magnitude: 2.99  
Absolute magnitude: -0.05  
Constellation: Hydra

131.  $\gamma$  Lupi  
Section 6  
RA 15h 36' 22.8"  
Decl. -41° 13' 39"  
Apparent magnitude: 2.8  
Absolute magnitude: -3.4  
Constellation: Lupus

159.  $\gamma$  Persei  
Section 2  
RA 3h 6' 8.9"  
Decl. 53° 34' 3"  
Apparent magnitude: 2.91  
Absolute magnitude: -1.57  
Constellation: Perseus

149.  $\gamma$  Trianguli Australis  
Section 6  
RA 15h 18' 54.582"  
Decl. -68° 40' 46.3654"  
Apparent magnitude: 2.87  
Absolute magnitude: -0.87  
Constellation: Triangulum Australe

100. Gienah Ghurab  
Section 5  
RA 12h 16' 45.6"  
Decl. -17° 38' 4"  
Apparent magnitude: 2.58  
Absolute magnitude: -0.94  
Constellation: Corvus

91. Gienah  
Section 8  
RA 20h 46' 57.6"  
Decl. 34° 2' 2"  
Apparent magnitude: 2.48  
Absolute magnitude: 0.76  
Constellation: Cygnus

83. Girtab  
Section 7  
RA 17h 43' 46.1"  
Decl. -39° 2' 16"  
Apparent magnitude: 2.39  
Absolute magnitude: -3.38  
Constellation: Scorpius

153. Gomeisa  
Section 3  
RA 7h 28' 9.2"  
Decl. 8° 15' 0"  
Apparent magnitude: 2.89  
Absolute magnitude: -0.7  
Constellation: Canis Minor

11. Hadar  
Section 6  
RA 14h 5' 8.7"  
Decl. -60° 27' 41"  
Apparent magnitude: 0.61  
Absolute magnitude: -5.42  
Constellation: Centaurus

50. Hamal  
Section 2  
RA 2h 8' 13.2"  
Decl. 23° 32' 5"  
Apparent magnitude: 2.01  
Absolute magnitude: 0.48  
Constellation: Aries

94. Han  
Section 7  
RA 16h 38' 10.8"  
Decl. -10° 36' 1"  
Apparent magnitude: 2.54  
Absolute magnitude: -3.2  
Constellation: Ophiuchus

112. Hassaleh  
Section 3  
RA 4h 58' 12.1"  
Decl. 33° 11' 3"  
Apparent magnitude: 2.69  
Absolute magnitude: -3.29  
Constellation: Auriga

123. Hatysa  
Section 3  
RA 5h 36' 20.3"  
Decl. -5° 53' 5"  
Apparent magnitude: 2.75  
Absolute magnitude: -5.3  
Constellation: Orion

170.  $\iota^1$  Scorpii  
 Section 7  
 RA 17h 48' 52.8"  
 Decl.  $-40^\circ 7' 56''$   
 Apparent magnitude: 2.99  
 Absolute magnitude: -5.71  
 Constellation: Scorpius

124.  $\iota$  Centauri  
 Section 5  
 RA 13h 21' 38.6"  
 Decl.  $-36^\circ 48' 34''$   
 Apparent magnitude: 2.75  
 Absolute magnitude: 1.48  
 Constellation: Centaurus

81. Izar  
 Section 6  
 RA 14h 45' 47.7"  
 Decl.  $26^\circ 59' 4''$   
 Apparent magnitude: 2.35  
 Absolute magnitude: -1.69  
 Constellation: Boötes

37. Kaus Australis  
 Section 7  
 RA 18h 25' 24"  
 Decl.  $-34^\circ 22' 2''$   
 Apparent magnitude: 1.84  
 Absolute magnitude: -1.39  
 Constellation: Sagittarius

136. Kaus Borealis  
 Section 7  
 RA 18h 29' 6.7"  
 Decl.  $-25^\circ 24' 3''$   
 Apparent magnitude: 2.82  
 Absolute magnitude: 0.95  
 Constellation: Sagittarius

117. Kaus Meridionalis  
 Section 7  
 RA 18h 22' 10.7"  
 Decl.  $-29^\circ 49' 0''$   
 Apparent magnitude: 2.72  
 Absolute magnitude: -2.14  
 Constellation: Sagittarius

111. Ke Kouan  
 Section 6  
 RA 14h 59' 45.1"  
 Decl.  $-43^\circ 12' 26''$   
 Apparent magnitude: 2.68  
 Absolute magnitude: -3.35  
 Constellation: Lupus

197. Ke Kwan  
 Section 6  
 RA 15h 0' 22.3"  
 Decl.  $-42^\circ 10' 38''$   
 Apparent magnitude: 3.13  
 Absolute magnitude: -2.96  
 Constellation: Centaurus

57. Kochab  
 Section 6  
 RA 14h 50' 40.2"  
 Decl.  $74^\circ 4' 4''$   
 Apparent magnitude: 2.07  
 Absolute magnitude: -0.87  
 Constellation: Ursa Minor

45. Koo She  
 Section 4  
 RA 8h 45' 12.9"  
 Decl.  $-54^\circ 46' 38''$   
 Apparent magnitude: 1.95  
 Absolute magnitude: 0.01  
 Constellation: Vela

127. Kornephoros  
 Section 7  
 RA 16h 31' 1"  
 Decl.  $21^\circ 27' 0''$   
 Apparent magnitude: 2.78  
 Absolute magnitude: -0.5  
 Constellation: Hercules

108. Kraz  
 Section 5  
 RA 12h 35' 21.7"  
 Decl.  $-23^\circ 29' 5''$   
 Apparent magnitude: 2.65  
 Absolute magnitude: -0.51  
 Constellation: Corvus

126. Kursa  
 Section 3  
 RA 5h 8' 45.6"  
 Decl.  $-5^\circ 3' 5''$   
 Apparent magnitude: 2.78  
 Absolute magnitude: 0.6  
 Constellation: Eridanus

191.  $\lambda$  Centauri  
 Section 5  
 RA 11h 36' 38.6"  
 Decl.  $-63^\circ 7' 20''$   
 Apparent magnitude: 3.11  
 Absolute magnitude: -2.39  
 Constellation: Centaurus

115. Lesath  
 Section 7  
 RA 17h 32' 1.4"  
 Decl.  $-37^\circ 18' 3''$   
 Apparent magnitude: 2.7  
 Absolute magnitude: -3.31  
 Constellation: Scorpius

92. Markab  
 Section 1  
 RA 23h 5' 41"  
 Decl.  $15^\circ 18' 1''$   
 Apparent magnitude: 2.49  
 Absolute magnitude: -0.67  
 Constellation: Pegasus

90. Markeb  
 Section 4  
 RA 9h 22' 41.2"  
 Decl.  $-55^\circ 5' 25''$   
 Apparent magnitude: 2.47  
 Absolute magnitude: -3.62  
 Constellation: Vela

161. Matar  
 Section 1  
 RA 22h 43' 52.3"  
 Decl.  $30^\circ 19' 0''$   
 Apparent magnitude: 2.93  
 Absolute magnitude: -1.16  
 Constellation: Pegasus

185. Mebsuta  
 Section 3  
 RA 6h 45' 4.2"  
 Decl.  $25^\circ 6' 4''$   
 Apparent magnitude: 3.06  
 Absolute magnitude: -4.15  
 Constellation: Gemini

41. Menkalinan  
 Section 3  
 RA 6h 0' 53.2"  
 Decl.  $44^\circ 56' 5''$   
 Apparent magnitude: 1.9  
 Absolute magnitude: -0.1  
 Constellation: Auriga

93. Menkar  
 Section 2  
 RA 3h 3' 14.9"  
 Decl.  $4^\circ 9' 4''$   
 Apparent magnitude: 2.54  
 Absolute magnitude: -1.61  
 Constellation: Cetus

53. Menkent  
 Section 6  
 RA 14h 7' 46.7"  
 Decl.  $-36^\circ 27' 3''$   
 Apparent magnitude: 2.06  
 Absolute magnitude: 0.7  
 Constellation: Centaurus

78. Men  
 Section 6  
 RA 14h 43' 10.1"  
 Decl.  $-47^\circ 27' 59''$   
 Apparent magnitude: 2.3  
 Absolute magnitude: -3.83  
 Constellation: Lupus

80. Merak  
 Section 5  
 RA 11h 2' 56.8"  
 Decl.  $56^\circ 16' 5''$   
 Apparent magnitude: 2.34  
 Absolute magnitude: 0.41  
 Constellation: Ursa Major

28. Miaplacidus  
Section 4  
RA 9h 13' 23.7"  
Decl.  $-69^{\circ} 47' 37''$   
Apparent magnitude: 1.67  
Absolute magnitude: -0.99  
Constellation: Carina

20. Mimosa  
Section 5  
RA 12h 48' 48.9"  
Decl.  $-59^{\circ} 47' 22''$   
Apparent magnitude: 1.26  
Absolute magnitude: -3.91  
Constellation: Crux

180. Minkar  
Section 5  
RA 12h 11' 4.7"  
Decl.  $-22^{\circ} 43' 2''$   
Apparent magnitude: 3.02  
Absolute magnitude: -1.82  
Constellation: Corvus

73. Mintaka  
Section 3  
RA 5h 32' 57.2"  
Decl.  $0^{\circ} 17' 1''$   
Apparent magnitude: 2.25  
Absolute magnitude: -4.99  
Constellation: Orion

55. Mirach  
Section 1  
RA 1h 10' 46.4"  
Decl.  $35^{\circ} 43' 0''$   
Apparent magnitude: 2.07  
Absolute magnitude: -1.86  
Constellation: Andromeda

33. Mirfak  
Section 2  
RA 3h 25' 39.2"  
Decl.  $49^{\circ} 55' 3''$   
Apparent magnitude: 1.8  
Absolute magnitude: -4.49  
Constellation: Perseus

46. Mirzam  
Section 3  
RA 6h 23' 30.9"  
Decl.  $-17^{\circ} 57' 5''$   
Apparent magnitude: 1.98  
Absolute magnitude: -3.95  
Constellation: Canis Major

69. Mizar  
Section 5  
RA 13h 24' 40.1"  
Decl.  $54^{\circ} 49' 4''$   
Apparent magnitude: 2.23  
Absolute magnitude: 0.33  
Constellation: Ursa Major

175.  $\mu^1$  Scorpii  
Section 7  
RA 16h 53' 7.6"  
Decl.  $-38^{\circ} 4' 39''$   
Apparent magnitude: 3  
Absolute magnitude: -4.01  
Constellation: Scorpius

64. Muhlifain  
Section 5  
RA 12h 42' 32.8"  
Decl.  $-49^{\circ} 3' 40''$   
Apparent magnitude: 2.2  
Absolute magnitude: -0.81  
Constellation: Centaurus

110. Muphrid  
Section 6  
RA 13h 55' 33.9"  
Decl.  $18^{\circ} 18' 2''$   
Apparent magnitude: 2.68  
Absolute magnitude: 2.41  
Constellation: Boötes

113.  $\mu$  Velorum  
Section 5  
RA 10h 47' 34.2"  
Decl.  $-49^{\circ} 31' 6''$   
Apparent magnitude: 2.69  
Absolute magnitude: -0.06  
Constellation: Vela

65. Naos  
Section 4  
RA 8h 4' 14.1"  
Decl.  $-40^{\circ} 3' 22''$   
Apparent magnitude: 2.21  
Absolute magnitude: -5.95  
Constellation: Puppis

132. Nihal  
Section 3  
RA 5h 29' 2.3"  
Decl.  $-20^{\circ} 44' 4''$   
Apparent magnitude: 2.81  
Absolute magnitude: -0.63  
Constellation: Lepus

190.  $\nu$  Hydræ  
Section 5  
RA 10h 50' 32.3"  
Decl.  $-16^{\circ} 17' 27''$   
Apparent magnitude: 3.11  
Absolute magnitude: -0.03  
Constellation: Hydra

52. Nunki  
Section 7  
RA 18h 56' 24.7"  
Decl.  $-26^{\circ} 16' 2''$   
Apparent magnitude: 2.05  
Absolute magnitude: -2.14  
Constellation: Sagittarius

199. N Velorum  
Section 4  
RA 9h 31' 13.3189"  
Decl.  $-57^{\circ} 2' 3.7578''$   
Apparent magnitude: 3.16  
Absolute magnitude: -1.15  
Constellation: Vela

179.  $\phi^2$  Canis Majoris  
Section 3  
RA 7h 3' 1.47211"  
Decl.  $-23^{\circ} 49' 59.8523''$   
Apparent magnitude: 3.02  
Absolute magnitude: -6.46  
Constellation: Canis Major

44. Peacock  
Section 8  
RA 20h 27' 6"  
Decl.  $-56^{\circ} 40' 27''$   
Apparent magnitude: 1.93  
Absolute magnitude: -1.82  
Constellation: Pavo

192. Persian  
Section 8  
RA 20h 38' 51.6"  
Decl.  $-47^{\circ} 13' 32''$   
Apparent magnitude: 3.11  
Absolute magnitude: 0.65  
Constellation: Indus

106. Phact  
Section 3  
RA 5h 40' 19.2"  
Decl.  $-34^{\circ} 3' 55''$   
Apparent magnitude: 2.65  
Absolute magnitude: -1.93  
Constellation: Columba

85. Phecda  
Section 5  
RA 11h 54' 47.8"  
Decl.  $53^{\circ} 35' 3''$   
Apparent magnitude: 2.41  
Absolute magnitude: 0.36  
Constellation: Ursa Major

174. Pherkad Major  
Section 6  
RA 15h 20' 42.8"  
Decl.  $71^{\circ} 46' 0''$   
Apparent magnitude: 3  
Absolute magnitude: -2.84  
Constellation: Ursa Minor

178. Phurad  
Section 3  
RA 6h 21' 1.4"  
Decl.  $-30^{\circ} 4' 2''$   
Apparent magnitude: 3.02  
Absolute magnitude: -2.05  
Constellation: Canis Major

200.  $\pi$  Herculis  
 Section 7  
 RA 17h 15' 41.5"  
 Decl. 36° 47' 2"  
 Apparent magnitude: 3.16  
 Absolute magnitude: -2.1  
 Constellation: Hercules

200.  $\pi$  Herculis  
 Section 7  
 RA 17h 15' 41.5"  
 Decl. 36° 47' 2"  
 Apparent magnitude: 3.16  
 Absolute magnitude: -2.1  
 Constellation: Hercules

116.  $\pi$  Puppis  
 Section 3  
 RA 7h 17' 47.8"  
 Decl. -37° 7' 54"  
 Apparent magnitude: 2.71  
 Absolute magnitude: -4.92  
 Constellation: Puppis

154.  $\pi$  Scorpii  
 Section 6  
 RA 15h 59' 58.5"  
 Decl. -26° 9' 5"  
 Apparent magnitude: 2.89  
 Absolute magnitude: -2.85  
 Constellation: Scorpius

17. Pollux  
 Section 4  
 RA 7h 46' 26.7"  
 Decl. 27° 58' 4"  
 Apparent magnitude: 1.14  
 Absolute magnitude: 1.07  
 Constellation: Gemini

122. Porrima  
 Section 5  
 RA 12h 41' 39.6434"  
 Decl. -1° 26' 57.7421"  
 Apparent magnitude: 2.74  
 Absolute magnitude: 2.38  
 Constellation: Virgo

8. Procyon  
 Section 4  
 RA 7h 40' 16.3"  
 Decl. 5° 10' 3"  
 Apparent magnitude: 0.36  
 Absolute magnitude: 2.64  
 Constellation: Canis Minor

173.  $\psi$  Ursae Majoris  
 Section 5  
 RA 11h 10' 41.8"  
 Decl. 44° 23' 5"  
 Apparent magnitude: 3  
 Absolute magnitude: -0.27  
 Constellation: Ursa Major

59. Rasalhague  
 Section 7  
 RA 17h 35' 47.6"  
 Decl. 12° 32' 5"  
 Apparent magnitude: 2.08  
 Absolute magnitude: 1.3  
 Constellation: Ophiuchus

167. Ras Elased Australis  
 Section 4  
 RA 9h 46' 53.9"  
 Decl. 23° 41' 1"  
 Apparent magnitude: 2.97  
 Absolute magnitude: -1.46  
 Constellation: Leo

129. Rastaban  
 Section 7  
 RA 17h 30' 51.1"  
 Decl. 52° 17' 1"  
 Apparent magnitude: 2.79  
 Absolute magnitude: -2.43  
 Constellation: Draco

35. Regor  
 Section 4  
 RA 8h 9' 31.9501"  
 Decl. -47° 20' 11.7108"  
 Apparent magnitude: 1.81  
 Absolute magnitude: -5.25  
 Constellation: Vela

21. Regulus  
 Section 4  
 RA 10h 9' 21.3"  
 Decl. 11° 52' 3"  
 Apparent magnitude: 1.36  
 Absolute magnitude: -0.52  
 Constellation: Leo

7. Rigel  
 Section 3  
 RA 5h 15' 25.7"  
 Decl. -8° 10' 5"  
 Apparent magnitude: 0.15v  
 Absolute magnitude: -6.72v  
 Constellation: Orion

109. Ruchbah  
 Section 1  
 RA 1h 27' 2.5"  
 Decl. 60° 19' 5"  
 Apparent magnitude: 2.66  
 Absolute magnitude: 0.24  
 Constellation: Cassiopeia

133. Rutilicus  
 Section 7  
 RA 16h 41' 59.1"  
 Decl. 31° 34' 1"  
 Apparent magnitude: 2.81  
 Absolute magnitude: 2.64  
 Constellation: Hercules

86. Sabik  
 Section 7  
 RA 17h 11' 26.4"  
 Decl. -15° 44' 4"  
 Apparent magnitude: 2.43  
 Absolute magnitude: 0.37  
 Constellation: Ophiuchus

164. Sadalmelik  
 Section 8  
 RA 22h 6' 44"  
 Decl. 0° 13' 4"  
 Apparent magnitude: 2.95  
 Absolute magnitude: -3.88  
 Constellation: Aquarius

158. Sadalsuud  
 Section 8  
 RA 21h 32' 31.9"  
 Decl. -5° 29' 2"  
 Apparent magnitude: 2.9  
 Absolute magnitude: -3.47  
 Constellation: Aquarius

70. Sadr  
 Section 8  
 RA 20h 22' 53.6"  
 Decl. 40° 19' 0"  
 Apparent magnitude: 2.23  
 Absolute magnitude: -6.12  
 Constellation: Cygnus

56. Saiph  
 Section 3  
 RA 5h 48' 38.1"  
 Decl. -9° 39' 5"  
 Apparent magnitude: 2.07  
 Absolute magnitude: -4.65  
 Constellation: Orion

39. Sargas  
 Section 7  
 RA 17h 38' 39"  
 Decl. -43° 0' 28"  
 Apparent magnitude: 1.86  
 Absolute magnitude: -2.75  
 Constellation: Scorpius

196. Sarin  
 Section 7  
 RA 17h 15' 47.5"  
 Decl. 24° 49' 0"  
 Apparent magnitude: 3.12  
 Absolute magnitude: 1.21  
 Constellation: Hercules

87. Scheat  
 Section 1  
 RA 23h 4' 40.4"  
 Decl. 28° 11' 0"  
 Apparent magnitude: 2.44v  
 Absolute magnitude: -1.49  
 Constellation: Pegasus



71. Schedar  
Section 1  
RA 0h 41' 34.1"  
Decl. 56° 38' 1"  
Apparent magnitude: 2.24  
Absolute magnitude: -1.99  
Constellation: Cassiopeia

183. Seginus  
Section 6  
RA 14h 32' 49.3"  
Decl. 38° 13' 4"  
Apparent magnitude: 3.04  
Absolute magnitude: 0.96  
Constellation: Boötes

24. Shaula  
Section 7  
RA 17h 34' 52"  
Decl. -37° 6' 5"  
Apparent magnitude: 1.62  
Absolute magnitude: -5.05  
Constellation: Scorpius

104. Sheratan  
Section 2  
RA 1h 55' 40"  
Decl. 20° 53' 5"  
Apparent magnitude: 2.64  
Absolute magnitude: 1.33  
Constellation: Aries

1. Sirius  
Section 3  
RA 6h 45' 57.4"  
Decl. -16° 44' 3"  
Apparent magnitude: -1.46  
Absolute magnitude: 1.43  
Constellation: Canis Major

16. Spica  
Section 5  
RA 13h 26' 10.2"  
Decl. -11° 15' 2"  
Apparent magnitude: 0.97  
Absolute magnitude: -3.56  
Constellation: Virgo

68. Suhail  
Section 4  
RA 9h 8' 40.7"  
Decl. -43° 30' 29"  
Apparent magnitude: 2.23  
Absolute magnitude: -3.99  
Constellation: Vela

187. Tais  
Section 7  
RA 19h 12' 33.3"  
Decl. 67° 41' 3"  
Apparent magnitude: 3.07  
Absolute magnitude: 0.63  
Constellation: Draco

194. Talita  
Section 4  
RA 9h 0' 28"  
Decl. 47° 58' 0"  
Apparent magnitude: 3.12  
Absolute magnitude: 2.29  
Constellation: Ursa Major

186. Tania Australis  
Section 4  
RA 10h 23' 25.5"  
Decl. 41° 24' 2"  
Apparent magnitude: 3.06  
Absolute magnitude: -1.35  
Constellation: Ursa Major

118. Tarazed  
Section 8  
RA 19h 47' 8.3"  
Decl. 10° 39' 3"  
Apparent magnitude: 2.72  
Absolute magnitude: -3.03  
Constellation: Aquila

162.  $\tau$  Puppis  
Section 3  
RA 6h 50' 23.7"  
Decl. -50° 38' 14"  
Apparent magnitude: 2.94  
Absolute magnitude: -0.8  
Constellation: Puppis

135.  $\tau$  Scorpii  
Section 7  
RA 16h 37' 2.2"  
Decl. -28° 15' 1"  
Apparent magnitude: 2.82  
Absolute magnitude: -2.78  
Constellation: Scorpius

148. Tejat  
Section 3  
RA 6h 24' 4.8"  
Decl. 22° 30' 0"  
Apparent magnitude: 2.87v  
Absolute magnitude: -1.39v  
Constellation: Gemini

107.  $\theta$  Aurigæ  
Section 3  
RA 6h 0' 59"  
Decl. 37° 12' 4"  
Apparent magnitude: 2.65  
Absolute magnitude: -0.98  
Constellation: Auriga

121.  $\theta$  Carinæ  
Section 5  
RA 10h 43' 37.3"  
Decl. -64° 29' 30"  
Apparent magnitude: 2.74  
Absolute magnitude: -2.91  
Constellation: Carina

138. Turais  
Section 4  
RA 8h 8' 19.9"  
Decl. -24° 21' 3"  
Apparent magnitude: 2.83  
Absolute magnitude: 1.41  
Constellation: Puppis

103. Unukalhai  
Section 6  
RA 15h 45' 10.8"  
Decl. 6° 22' 0"  
Apparent magnitude: 2.63  
Absolute magnitude: 0.87  
Constellation: Serpens

160.  $\nu$  Carinæ  
Section 4  
RA 9h 47' 33.8"  
Decl. -65° 9' 29"  
Apparent magnitude: 2.92  
Absolute magnitude: -5.56  
Constellation: Carina

5. Vega  
Section 7  
RA 18h 37' 33.9"  
Decl. 38° 48' 0"  
Apparent magnitude: 0.03  
Absolute magnitude: 0.58  
Constellation: Lyra

144. Vindemiatrix  
Section 5  
RA 13h 3' 5.9"  
Decl. 10° 51' 3"  
Apparent magnitude: 2.85  
Absolute magnitude: 0.37  
Constellation: Virgo

193. Wazn  
Section 3  
RA 5h 51' 36.8"  
Decl. -35° 45' 44"  
Apparent magnitude: 3.12  
Absolute magnitude: 1.02  
Constellation: Columba

77. Wei  
Section 7  
RA 16h 51' 21.9"  
Decl. -34° 19' 3"  
Apparent magnitude: 2.29  
Absolute magnitude: 0.78  
Constellation: Scorpius

36. Wezen  
Section 3  
RA 7h 9' 8.6"  
Decl. -26° 25' 2"  
Apparent magnitude: 1.83  
Absolute magnitude: -6.87  
Constellation: Canis Major

119. Yed Prior  
 Section 6  
 RA 16h 15' 19"  
 Decl.  $-3^{\circ} 44' 2''$   
 Apparent magnitude: 2.73  
 Absolute magnitude: -0.86  
 Constellation: Ophiuchus

165. Zaurak  
 Section 2  
 RA 3h 58' 53.6"  
 Decl.  $-13^{\circ} 27' 2''$   
 Apparent magnitude: 2.97  
 Absolute magnitude: -1.19  
 Constellation: Eridanus

195.  $\zeta$  Aræ  
 Section 7  
 RA 17h 0' 9.4"  
 Decl.  $-56^{\circ} 1' 2''$   
 Apparent magnitude: 3.12  
 Absolute magnitude: -3.11  
 Constellation: Ara

95.  $\zeta$  Centauri  
 Section 6  
 RA 13h 56' 42.2"  
 Decl.  $-47^{\circ} 22' 43''$   
 Apparent magnitude: 2.55  
 Absolute magnitude: -2.81  
 Constellation: Centaurus

189.  $\zeta$  Hydræ  
 Section 4  
 RA 8h 56' 22.2"  
 Decl.  $5^{\circ} 52' 2''$   
 Apparent magnitude: 3.11  
 Absolute magnitude: -0.21  
 Constellation: Hydra

140.  $\zeta$  Persei  
 Section 2  
 RA 3h 55' 18"  
 Decl.  $31^{\circ} 56' 1''$   
 Apparent magnitude: 2.84  
 Absolute magnitude: -4.55  
 Constellation: Perseus

96. Zosma  
 Section 5  
 RA 11h 15' 5.4"  
 Decl.  $20^{\circ} 25' 1''$   
 Apparent magnitude: 2.56  
 Absolute magnitude: 1.32  
 Constellation: Leo

105. Zubenelgenubi  
 Section 6  
 RA 14h 50' 52.7131"  
 Decl.  $-16^{\circ} 2' 30.3955''$   
 Apparent magnitude: 2.64  
 Absolute magnitude: 0.77  
 Constellation: Libra

102. Zubeneshamali  
 Section 6  
 RA 15h 18' 0.3"  
 Decl.  $-9^{\circ} 27' 0''$   
 Apparent magnitude: 2.61  
 Absolute magnitude: -0.84  
 Constellation: Libra

## Stars According to Brightness

<p>1. Sirius Section 3 RA 6h 45' 57.4" Decl. -16° 44' 3" Apparent magnitude: -1.46 Absolute magnitude: 1.43 Constellation: Canis Major</p>	<p>8. Procyon Section 4 RA 7h 40' 16.3" Decl. 5° 10' 3" Apparent magnitude: 0.36 Absolute magnitude: 2.64 Constellation: Canis Minor</p>	<p>16. Spica Section 5 RA 13h 26' 10.2" Decl. -11° 15' 2" Apparent magnitude: 0.97 Absolute magnitude: -3.56 Constellation: Virgo</p>
<p>2. Canopus Section 3 RA 6h 24' 21.8" Decl. -52° 42' 23" Apparent magnitude: -0.73 Absolute magnitude: -5.64 Constellation: Carina</p>	<p>9. Achernar Section 2 RA 1h 38' 24" Decl. -57° 8' 36" Apparent magnitude: 0.45 Absolute magnitude: -2.77 Constellation: Eridanus</p>	<p>17. Pollux Section 4 RA 7h 46' 26.7" Decl. 27° 58' 4" Apparent magnitude: 1.14 Absolute magnitude: 1.07 Constellation: Gemini</p>
<p>3. <math>\alpha</math> Centauri Section 6 RA 14h 39' 35.0631" Decl. -60° 50' 15.0992" Apparent magnitude: -0.29 Absolute magnitude: 4.06 Constellation: Centaurus</p>	<p>10. Betelgeuse Section 3 RA 5h 56' 10.4" Decl. 7° 24' 3" Apparent magnitude: 0.55v Absolute magnitude: -5.04v Constellation: Orion</p>	<p>18. Fomalhaut Section 1 RA 22h 57' 39.0465" Decl. -29° 37' 20.05" Apparent magnitude: 1.15 Absolute magnitude: 1.72 Constellation: Piscis Austrinus</p>
<p>4. Arcturus Section 6 RA 14h 16' 30.3" Decl. 19° 5' 1" Apparent magnitude: -0.05 Absolute magnitude: -0.31 Constellation: Boötes</p>	<p>11. Hadar Section 6 RA 14h 5' 8.7" Decl. -60° 27' 41" Apparent magnitude: 0.61 Absolute magnitude: -5.42 Constellation: Centaurus</p>	<p>19. Deneb Section 8 RA 20h 42' 3.8" Decl. 45° 20' 5" Apparent magnitude: 1.24 Absolute magnitude: -8.74 Constellation: Cygnus</p>
<p>5. Vega Section 7 RA 18h 37' 33.9" Decl. 38° 48' 0" Apparent magnitude: 0.03 Absolute magnitude: 0.58 Constellation: Lyra</p>	<p>12. Altair Section 8 RA 19h 51' 41.1" Decl. 8° 55' 0" Apparent magnitude: 0.77 Absolute magnitude: 2.21 Constellation: Aquila</p>	<p>20. Mimosa Section 5 RA 12h 48' 48.9" Decl. -59° 47' 22" Apparent magnitude: 1.26 Absolute magnitude: -3.91 Constellation: Crux</p>
<p>6. Capella Section 3 RA 5h 18' 3.5" Decl. 46° 0' 5" Apparent magnitude: 0.07 Absolute magnitude: -0.49 Constellation: Auriga</p>	<p>14. Aldebaran Section 3 RA 4h 36' 59.1" Decl. 16° 32' 4" Apparent magnitude: 0.86v Absolute magnitude: -0.64v Constellation: Taurus</p>	<p>21. Regulus Section 4 RA 10h 9' 21.3" Decl. 11° 52' 3" Apparent magnitude: 1.36 Absolute magnitude: -0.52 Constellation: Leo</p>
<p>7. Rigel Section 3 RA 5h 15' 25.7" Decl. -8° 10' 5" Apparent magnitude: 0.15v Absolute magnitude: -6.72v Constellation: Orion</p>	<p>15. Antares Section 7 RA 16h 30' 32.7" Decl. -26° 28' 1" Apparent magnitude: 0.95v Absolute magnitude: -5.39v Constellation: Scorpius</p>	<p>22. Adhara Section 3 RA 6h 59' 21.2" Decl. -28° 59' 5" Apparent magnitude: 1.5 Absolute magnitude: -4.1 Constellation: Canis Major</p>

23. Castor  
Section 4  
RA 7h 34' 35.863"  
Decl. 31° 53' 17.79"  
Apparent magnitude: 1.58  
Absolute magnitude: 0.59  
Constellation: Gemini

24. Shaula  
Section 7  
RA 17h 34' 52"  
Decl. -37° 6' 5"  
Apparent magnitude: 1.62  
Absolute magnitude: -5.05  
Constellation: Scorpius

25. Gacrux  
Section 5  
RA 12h 32' 12.2"  
Decl. -57° 13' 0"  
Apparent magnitude: 1.63  
Absolute magnitude: -0.52  
Constellation: Crux

26. Bellatrix  
Section 3  
RA 5h 26' 7.5"  
Decl. 6° 21' 5"  
Apparent magnitude: 1.64  
Absolute magnitude: -2.72  
Constellation: Orion

27. Elnath  
Section 3  
RA 5h 27' 27.8"  
Decl. 28° 37' 1"  
Apparent magnitude: 1.66  
Absolute magnitude: -1.36  
Constellation: Taurus

28. Miaplacidus  
Section 4  
RA 9h 13' 23.7"  
Decl. -69° 47' 37"  
Apparent magnitude: 1.67  
Absolute magnitude: -0.99  
Constellation: Carina

29. Alnilam  
Section 3  
RA 5h 37' 9.2"  
Decl. -1° 11' 2"  
Apparent magnitude: 1.69  
Absolute magnitude: -6.38  
Constellation: Orion

30. Alnair  
Section 8  
RA 22h 9' 23.4"  
Decl. -46° 52' 14"  
Apparent magnitude: 1.74  
Absolute magnitude: -0.72  
Constellation: Grus

31. Alnitak  
Section 3  
RA 5h 41' 41.6"  
Decl. -1° 56' 0"  
Apparent magnitude: 1.75  
Absolute magnitude: -5.25  
Constellation: Orion

32. Alioth  
Section 5  
RA 12h 54' 50.3"  
Decl. 55° 51' 3"  
Apparent magnitude: 1.77  
Absolute magnitude: -0.2  
Constellation: Ursa Major

33. Mirfak  
Section 2  
RA 3h 25' 39.2"  
Decl. 49° 55' 3"  
Apparent magnitude: 1.8  
Absolute magnitude: -4.49  
Constellation: Perseus

34. Dubhe  
Section 5  
RA 11h 4' 51.2"  
Decl. 61° 39' 0"  
Apparent magnitude: 1.8  
Absolute magnitude: -1.09  
Constellation: Ursa Major

35. Regor  
Section 4  
RA 8h 9' 31.9501"  
Decl. -47° 20' 11.7108"  
Apparent magnitude: 1.81  
Absolute magnitude: -5.25  
Constellation: Vela

36. Wezen  
Section 3  
RA 7h 9' 8.6"  
Decl. -26° 25' 2"  
Apparent magnitude: 1.83  
Absolute magnitude: -6.87  
Constellation: Canis Major

37. Kaus Australis  
Section 7  
RA 18h 25' 24"  
Decl. -34° 22' 2"  
Apparent magnitude: 1.84  
Absolute magnitude: -1.39  
Constellation: Sagittarius

38. Alkaid  
Section 6  
RA 13h 48' 16.1"  
Decl. 49° 13' 1"  
Apparent magnitude: 1.86  
Absolute magnitude: -0.59  
Constellation: Ursa Major

39. Sargas  
Section 7  
RA 17h 38' 39"  
Decl. -43° 0' 28"  
Apparent magnitude: 1.86  
Absolute magnitude: -2.75  
Constellation: Scorpius

40. Avior  
Section 4  
RA 8h 22' 53.5"  
Decl. -59° 34' 10"  
Apparent magnitude: 1.87  
Absolute magnitude: -4.57  
Constellation: Carina

41. Menkalinan  
Section 3  
RA 6h 0' 53.2"  
Decl. 44° 56' 5"  
Apparent magnitude: 1.9  
Absolute magnitude: -0.1  
Constellation: Auriga

42. Atria  
Section 7  
RA 16h 48' 39.8951"  
Decl. -69° 1' 39.7626"  
Apparent magnitude: 1.92  
Absolute magnitude: -3.61  
Constellation: Triangulum Australe

43. Alhena  
Section 3  
RA 6h 38' 46.8"  
Decl. 16° 22' 5"  
Apparent magnitude: 1.93  
Absolute magnitude: -0.6  
Constellation: Gemini

44. Peacock  
Section 8  
RA 20h 27' 6"  
Decl. -56° 40' 27"  
Apparent magnitude: 1.93  
Absolute magnitude: -1.82  
Constellation: Pavo

45. Koo She  
Section 4  
RA 8h 45' 12.9"  
Decl. -54° 46' 38"  
Apparent magnitude: 1.95  
Absolute magnitude: 0.01  
Constellation: Vela

46. Mirzam  
Section 3  
RA 6h 23' 30.9"  
Decl. -17° 57' 5"  
Apparent magnitude: 1.98  
Absolute magnitude: -3.95  
Constellation: Canis Major

47. Alphard Section 4 RA 9h 28' 29.8" Decl. $-8^{\circ} 44' 2''$ Apparent magnitude: 1.98 Absolute magnitude: -1.7 Constellation: Hydra	56. Saiph Section 3 RA 5h 48' 38.1" Decl. $-9^{\circ} 39' 5''$ Apparent magnitude: 2.07 Absolute magnitude: -4.65 Constellation: Orion	64. Muhlifain Section 5 RA 12h 42' 32.8" Decl. $-49^{\circ} 3' 40''$ Apparent magnitude: 2.2 Absolute magnitude: -0.81 Constellation: Centaurus
49. Algieba Section 4 RA 10h 19' 58.3506" Decl. $19^{\circ} 50' 29.3468''$ Apparent magnitude: 2 Absolute magnitude: -0.93 Constellation: Leo	57. Kochab Section 6 RA 14h 50' 40.2" Decl. $74^{\circ} 4' 4''$ Apparent magnitude: 2.07 Absolute magnitude: -0.87 Constellation: Ursa Minor	65. Naos Section 4 RA 8h 4' 14.1" Decl. $-40^{\circ} 3' 22''$ Apparent magnitude: 2.21 Absolute magnitude: -5.95 Constellation: Puppis
50. Hamal Section 2 RA 2h 8' 13.2" Decl. $23^{\circ} 32' 5''$ Apparent magnitude: 2.01 Absolute magnitude: 0.48 Constellation: Aries	58. Al Dhanab Section 1 RA 22h 43' 45.8" Decl. $-46^{\circ} 47' 14''$ Apparent magnitude: 2.07v Absolute magnitude: 1.52 Constellation: Grus	66. Aspidiske Section 4 RA 9h 17' 35.1" Decl. $-59^{\circ} 21' 12''$ Apparent magnitude: 2.21v Absolute magnitude: -4.42 Constellation: Carina
51. Diphda Section 1 RA 0h 44' 31" Decl. $-17^{\circ} 53' 0''$ Apparent magnitude: 2.04 Absolute magnitude: -0.3 Constellation: Cetus	59. Rasalhague Section 7 RA 17h 35' 47.6" Decl. $12^{\circ} 32' 5''$ Apparent magnitude: 2.08 Absolute magnitude: 1.3 Constellation: Ophiuchus	67. Alphecca Section 6 RA 15h 35' 28.3" Decl. $26^{\circ} 39' 1''$ Apparent magnitude: 2.22 Absolute magnitude: 0.42 Constellation: Corona Borealis
52. Nunki Section 7 RA 18h 56' 24.7" Decl. $-26^{\circ} 16' 2''$ Apparent magnitude: 2.05 Absolute magnitude: -2.14 Constellation: Sagittarius	60. Algol Section 2 RA 3h 9' 22.8" Decl. $41^{\circ} 1' 3''$ Apparent magnitude: 2.09 Absolute magnitude: 0.18 Constellation: Perseus	68. Suhail Section 4 RA 9h 8' 40.7" Decl. $-43^{\circ} 30' 29''$ Apparent magnitude: 2.23 Absolute magnitude: -3.99 Constellation: Vela
53. Menkent Section 6 RA 14h 7' 46.7" Decl. $-36^{\circ} 27' 3''$ Apparent magnitude: 2.06 Absolute magnitude: 0.7 Constellation: Centaurus	61. Almach Section 2 RA 2h 3' 53.9523" Decl. $42^{\circ} 19' 47.0223''$ Apparent magnitude: 2.1 Absolute magnitude: -3.08 Constellation: Andromeda	69. Mizar Section 5 RA 13h 24' 40.1" Decl. $54^{\circ} 49' 4''$ Apparent magnitude: 2.23 Absolute magnitude: 0.33 Constellation: Ursa Major
54. Alpheratz Section 1 RA 0h 9' 20.9" Decl. $29^{\circ} 11' 3''$ Apparent magnitude: 2.07 Absolute magnitude: -0.3 Constellation: Andromeda	62. Denebola Section 5 RA 11h 50' 0.1" Decl. $14^{\circ} 28' 0''$ Apparent magnitude: 2.14 Absolute magnitude: 1.92 Constellation: Leo	70. Sadr Section 8 RA 20h 22' 53.6" Decl. $40^{\circ} 19' 0''$ Apparent magnitude: 2.23 Absolute magnitude: -6.12 Constellation: Cygnus
55. Mirach Section 1 RA 1h 10' 46.4" Decl. $35^{\circ} 43' 0''$ Apparent magnitude: 2.07 Absolute magnitude: -1.86 Constellation: Andromeda	63. Cih Section 1 RA 0h 57' 50.4" Decl. $60^{\circ} 48' 5''$ Apparent magnitude: 2.15v Absolute magnitude: -4.22 Constellation: Cassiopeia	71. Scharar Section 1 RA 0h 41' 34.1" Decl. $56^{\circ} 38' 1''$ Apparent magnitude: 2.24 Absolute magnitude: -1.99 Constellation: Cassiopeia

72. Eltanin  
Section 7  
RA 17h 57' 2.2"  
Decl. 51° 29' 1"  
Apparent magnitude: 2.24  
Absolute magnitude: -1.04  
Constellation: Draco

73. Mintaka  
Section 3  
RA 5h 32' 57.2"  
Decl. 0° 17' 1"  
Apparent magnitude: 2.25  
Absolute magnitude: -4.99  
Constellation: Orion

74. Caph  
Section 1  
RA 0h 10' 10.6"  
Decl. 59° 15' 0"  
Apparent magnitude: 2.28  
Absolute magnitude: 1.17  
Constellation: Cassiopeia

75.  $\epsilon$  Centauri  
Section 6  
RA 13h 41' 4.3"  
Decl. -53° 33' 35"  
Apparent magnitude: 2.29  
Absolute magnitude: -3.02  
Constellation: Centaurus

76. Dschubba  
Section 6  
RA 16h 1' 25.8"  
Decl. -22° 40' 2"  
Apparent magnitude: 2.29  
Absolute magnitude: -3.16  
Constellation: Scorpius

77. Wei  
Section 7  
RA 16h 51' 21.9"  
Decl. -34° 19' 3"  
Apparent magnitude: 2.29  
Absolute magnitude: 0.78  
Constellation: Scorpius

78. Men  
Section 6  
RA 14h 43' 10.1"  
Decl. -47° 27' 59"  
Apparent magnitude: 2.3  
Absolute magnitude: -3.83  
Constellation: Lupus

79.  $\eta$  Centauri  
Section 6  
RA 14h 36' 41.4"  
Decl. -42° 14' 17"  
Apparent magnitude: 2.33v  
Absolute magnitude: -2.55  
Constellation: Centaurus

80. Merak  
Section 5  
RA 11h 2' 56.8"  
Decl. 56° 16' 5"  
Apparent magnitude: 2.34  
Absolute magnitude: 0.41  
Constellation: Ursa Major

81. Izar  
Section 6  
RA 14h 45' 47.7"  
Decl. 26° 59' 4"  
Apparent magnitude: 2.35  
Absolute magnitude: -1.69  
Constellation: Boötes

82. Enif  
Section 8  
RA 21h 45' 5.7"  
Decl. 9° 57' 3"  
Apparent magnitude: 2.38  
Absolute magnitude: -4.19  
Constellation: Pegasus

83. Girtab  
Section 7  
RA 17h 43' 46.1"  
Decl. -39° 2' 16"  
Apparent magnitude: 2.39  
Absolute magnitude: -3.38  
Constellation: Scorpius

84. Ankaa  
Section 1  
RA 0h 27' 11.7"  
Decl. -42° 12' 20"  
Apparent magnitude: 2.4  
Absolute magnitude: 0.52  
Constellation: Phoenix

85. Phecda  
Section 5  
RA 11h 54' 47.8"  
Decl. 53° 35' 3"  
Apparent magnitude: 2.41  
Absolute magnitude: 0.36  
Constellation: Ursa Major

86. Sabik  
Section 7  
RA 17h 11' 26.4"  
Decl. -15° 44' 4"  
Apparent magnitude: 2.43  
Absolute magnitude: 0.37  
Constellation: Ophiuchus

87. Scheat  
Section 1  
RA 23h 4' 40.4"  
Decl. 28° 11' 0"  
Apparent magnitude: 2.44v  
Absolute magnitude: -1.49  
Constellation: Pegasus

88. Aludra  
Section 3  
RA 7h 24' 49.6"  
Decl. -29° 20' 2"  
Apparent magnitude: 2.45  
Absolute magnitude: -7.51  
Constellation: Canis Major

89. Alderamin  
Section 8  
RA 21h 19' 1.2"  
Decl. 62° 39' 5"  
Apparent magnitude: 2.45  
Absolute magnitude: 1.58  
Constellation: Cepheus

90. Markeb  
Section 4  
RA 9h 22' 41.2"  
Decl. -55° 5' 25"  
Apparent magnitude: 2.47  
Absolute magnitude: -3.62  
Constellation: Vela

91. Gienah  
Section 8  
RA 20h 46' 57.6"  
Decl. 34° 2' 2"  
Apparent magnitude: 2.48  
Absolute magnitude: 0.76  
Constellation: Cygnus

92. Markab  
Section 1  
RA 23h 5' 41"  
Decl. 15° 18' 1"  
Apparent magnitude: 2.49  
Absolute magnitude: -0.67  
Constellation: Pegasus

93. Menkar  
Section 2  
RA 3h 3' 14.9"  
Decl. 4° 9' 4"  
Apparent magnitude: 2.54  
Absolute magnitude: -1.61  
Constellation: Cetus

94. Han  
Section 7  
RA 16h 38' 10.8"  
Decl. -10° 36' 1"  
Apparent magnitude: 2.54  
Absolute magnitude: -3.2  
Constellation: Ophiuchus

95.  $\zeta$  Centauri  
Section 6  
RA 13h 56' 42.2"  
Decl. -47° 22' 43"  
Apparent magnitude: 2.55  
Absolute magnitude: -2.81  
Constellation: Centaurus

96. Zosma Section 5 RA 11h 15' 5.4" Decl. 20° 25' 1" Apparent magnitude: 2.56 Absolute magnitude: 1.32 Constellation: Leo	105. Zubenelgenubi Section 6 RA 14h 50' 52.7131" Decl. -16° 2' 30.3955" Apparent magnitude: 2.64 Absolute magnitude: 0.77 Constellation: Libra	113. $\mu$ Velorum Section 5 RA 10h 47' 34.2" Decl. -49° 31' 6" Apparent magnitude: 2.69 Absolute magnitude: -0.06 Constellation: Vela
98. Arneb Section 3 RA 5h 33' 32.8" Decl. -17° 48' 3" Apparent magnitude: 2.58 Absolute magnitude: -5.4 Constellation: Lepus	106. Phact Section 3 RA 5h 40' 19.2" Decl. -34° 3' 55" Apparent magnitude: 2.65 Absolute magnitude: -1.93 Constellation: Columba	114. $\alpha$ Muscæ Section 5 RA 12h 38' 18.4" Decl. -69° 14' 14" Apparent magnitude: 2.69 Absolute magnitude: -2.17 Constellation: Musca
99. $\delta$ Centauri Section 5 RA 12h 9' 19.5" Decl. -50° 49' 31" Apparent magnitude: 2.58v Absolute magnitude: -2.84 Constellation: Centaurus	107. $\theta$ Aurigæ Section 3 RA 6h 0' 59" Decl. 37° 12' 4" Apparent magnitude: 2.65 Absolute magnitude: -0.98 Constellation: Auriga	115. Lesath Section 7 RA 17h 32' 1.4" Decl. -37° 18' 3" Apparent magnitude: 2.7 Absolute magnitude: -3.31 Constellation: Scorpis
100. Gienah Ghurab Section 5 RA 12h 16' 45.6" Decl. -17° 38' 4" Apparent magnitude: 2.58 Absolute magnitude: -0.94 Constellation: Corvus	108. Kraz Section 5 RA 12h 35' 21.7" Decl. -23° 29' 5" Apparent magnitude: 2.65 Absolute magnitude: -0.51 Constellation: Corvus	116. $\pi$ Puppis Section 3 RA 7h 17' 47.8" Decl. -37° 7' 54" Apparent magnitude: 2.71 Absolute magnitude: -4.92 Constellation: Puppis
101. Ascella Section 7 RA 19h 3' 47.2" Decl. -29° 51' 0" Apparent magnitude: 2.6 Absolute magnitude: 0.42 Constellation: Sagittarius	109. Ruchbah Section 1 RA 1h 27' 2.5" Decl. 60° 19' 5" Apparent magnitude: 2.66 Absolute magnitude: 0.24 Constellation: Cassiopeia	117. Kaus Meridionalis Section 7 RA 18h 22' 10.7" Decl. -29° 49' 0" Apparent magnitude: 2.72 Absolute magnitude: -2.14 Constellation: Sagittarius
102. Zubeneshamali Section 6 RA 15h 18' 0.3" Decl. -9° 27' 0" Apparent magnitude: 2.61 Absolute magnitude: -0.84 Constellation: Libra	110. Muphrid Section 6 RA 13h 55' 33.9" Decl. 18° 18' 2" Apparent magnitude: 2.68 Absolute magnitude: 2.41 Constellation: Boötes	118. Tarazed Section 8 RA 19h 47' 8.3" Decl. 10° 39' 3" Apparent magnitude: 2.72 Absolute magnitude: -3.03 Constellation: Aquila
103. Unukalhai Section 6 RA 15h 45' 10.8" Decl. 6° 22' 0" Apparent magnitude: 2.63 Absolute magnitude: 0.87 Constellation: Serpens	111. Ke Kouan Section 6 RA 14h 59' 45.1" Decl. -43° 12' 26" Apparent magnitude: 2.68 Absolute magnitude: -3.35 Constellation: Lupus	119. Yed Prior Section 6 RA 16h 15' 19" Decl. -3° 44' 2" Apparent magnitude: 2.73 Absolute magnitude: -0.86 Constellation: Ophiuchus
104. Sheratan Section 2 RA 1h 55' 40" Decl. 20° 53' 5" Apparent magnitude: 2.64 Absolute magnitude: 1.33 Constellation: Aries	112. Hassaleh Section 3 RA 4h 58' 12.1" Decl. 33° 11' 3" Apparent magnitude: 2.69 Absolute magnitude: -3.29 Constellation: Auriga	120. Aldhibain Section 6 RA 16h 24' 14.7" Decl. 61° 28' 2" Apparent magnitude: 2.73 Absolute magnitude: 0.58 Constellation: Draco

121.  $\theta$  Carinæ  
 Section 5  
 RA 10h 43' 37.3"  
 Decl.  $-64^{\circ} 29' 30''$   
 Apparent magnitude: 2.74  
 Absolute magnitude: -2.91  
 Constellation: Carina

122. Porrima  
 Section 5  
 RA 12h 41' 39.6434"  
 Decl.  $-1^{\circ} 26' 57.7421''$   
 Apparent magnitude: 2.74  
 Absolute magnitude: 2.38  
 Constellation: Virgo

123. Hatysa  
 Section 3  
 RA 5h 36' 20.3"  
 Decl.  $-5^{\circ} 53' 5''$   
 Apparent magnitude: 2.75  
 Absolute magnitude: -5.3  
 Constellation: Orion

124.  $\iota$  Centauri  
 Section 5  
 RA 13h 21' 38.6"  
 Decl.  $-36^{\circ} 48' 34''$   
 Apparent magnitude: 2.75  
 Absolute magnitude: 1.48  
 Constellation: Centaurus

125. Cebalrai  
 Section 7  
 RA 17h 44' 23.2"  
 Decl.  $4^{\circ} 33' 3''$   
 Apparent magnitude: 2.76  
 Absolute magnitude: 0.76  
 Constellation: Ophiuchus

126. Kursa  
 Section 3  
 RA 5h 8' 45.6"  
 Decl.  $-5^{\circ} 3' 5''$   
 Apparent magnitude: 2.78  
 Absolute magnitude: 0.6  
 Constellation: Eridanus

127. Kornephoros  
 Section 7  
 RA 16h 31' 1"  
 Decl.  $21^{\circ} 27' 0''$   
 Apparent magnitude: 2.78  
 Absolute magnitude: -0.5  
 Constellation: Hercules

128.  $\delta$  Crucis  
 Section 5  
 RA 12h 16' 8.3"  
 Decl.  $-58^{\circ} 51' 6''$   
 Apparent magnitude: 2.79  
 Absolute magnitude: -2.45  
 Constellation: Crux

129. Rastaban  
 Section 7  
 RA 17h 30' 51.1"  
 Decl.  $52^{\circ} 17' 1''$   
 Apparent magnitude: 2.79  
 Absolute magnitude: -2.43  
 Constellation: Draco

130. Cor Caroli 2  
 Section 5  
 RA 12h 56' 1.66622"  
 Decl.  $38^{\circ} 19' 6.1541''$   
 Apparent magnitude: 2.98v  
 Absolute magnitude: 0.16  
 Constellation: Canes Venatici

131.  $\gamma$  Lupi  
 Section 6  
 RA 15h 36' 22.8"  
 Decl.  $-41^{\circ} 13' 39''$   
 Apparent magnitude: 2.8  
 Absolute magnitude: -3.4  
 Constellation: Lupus

132. Nihal  
 Section 3  
 RA 5h 29' 2.3"  
 Decl.  $-20^{\circ} 44' 4''$   
 Apparent magnitude: 2.81  
 Absolute magnitude: -0.63  
 Constellation: Lepus

133. Rutilicus  
 Section 7  
 RA 16h 41' 59.1"  
 Decl.  $31^{\circ} 34' 1''$   
 Apparent magnitude: 2.81  
 Absolute magnitude: 2.64  
 Constellation: Hercules

134.  $\beta$  Hydri  
 Section 1  
 RA 0h 26' 41.9"  
 Decl.  $-77^{\circ} 9' 1''$   
 Apparent magnitude: 2.82  
 Absolute magnitude: 3.45  
 Constellation: Hydrus

135.  $\tau$  Scorpii  
 Section 7  
 RA 16h 37' 2.2"  
 Decl.  $-28^{\circ} 15' 1''$   
 Apparent magnitude: 2.82  
 Absolute magnitude: -2.78  
 Constellation: Scorpius

136. Kaus Borealis  
 Section 7  
 RA 18h 29' 6.7"  
 Decl.  $-25^{\circ} 24' 3''$   
 Apparent magnitude: 2.82  
 Absolute magnitude: 0.95  
 Constellation: Sagittarius

137. Algenib  
 Section 1  
 RA 0h 14' 11.4"  
 Decl.  $15^{\circ} 17' 1''$   
 Apparent magnitude: 2.83  
 Absolute magnitude: -2.22  
 Constellation: Pegasus

138. Turais  
 Section 4  
 RA 8h 8' 19.9"  
 Decl.  $-24^{\circ} 21' 3''$   
 Apparent magnitude: 2.83  
 Absolute magnitude: 1.41  
 Constellation: Puppis

139.  $\beta$  Trianguli Australis  
 Section 6  
 RA 15h 56' 47.3"  
 Decl.  $-63^{\circ} 29' 9''$   
 Apparent magnitude: 2.83  
 Absolute magnitude: 2.38  
 Constellation: Triangulum Australe

140.  $\zeta$  Persei  
 Section 2  
 RA 3h 55' 18"  
 Decl.  $31^{\circ} 56' 1''$   
 Apparent magnitude: 2.84  
 Absolute magnitude: -4.55  
 Constellation: Perseus

141.  $\beta$  Arae  
 Section 7  
 RA 17h 26' 50.5"  
 Decl.  $-55^{\circ} 32' 43''$   
 Apparent magnitude: 2.84  
 Absolute magnitude: -3.49  
 Constellation: Ara

142. Choo  
 Section 7  
 RA 17h 33' 16.4"  
 Decl.  $-49^{\circ} 53' 20''$   
 Apparent magnitude: 2.84  
 Absolute magnitude: -1.51  
 Constellation: Ara

143. Alcyone  
 Section 2  
 RA 3h 48' 35.3"  
 Decl.  $24^{\circ} 9' 4''$   
 Apparent magnitude: 2.85  
 Absolute magnitude: -2.41  
 Constellation: Taurus

144. Vindemiatrix  
 Section 5  
 RA 13h 3' 5.9"  
 Decl.  $10^{\circ} 51' 3''$   
 Apparent magnitude: 2.85  
 Absolute magnitude: 0.37  
 Constellation: Virgo



145. Deneb Algedi Section 8 RA 21h 48' 3.6" Decl. $-16^{\circ} 2' 3''$ Apparent magnitude: 2.85 Absolute magnitude: 2.49 Constellation: Capricornus	153. Gomeisa Section 3 RA 7h 28' 9.2" Decl. $8^{\circ} 15' 0''$ Apparent magnitude: 2.89 Absolute magnitude: -0.7 Constellation: Canis Minor	161. Matar Section 1 RA 22h 43' 52.3" Decl. $30^{\circ} 19' 0''$ Apparent magnitude: 2.93 Absolute magnitude: -1.16 Constellation: Pegasus
146. $\alpha$ Hydri Section 2 RA 1h 59' 21.1" Decl. $-61^{\circ} 28' 49''$ Apparent magnitude: 2.86 Absolute magnitude: 1.16 Constellation: Hydrus	154. $\pi$ Scorpii Section 6 RA 15h 59' 58.5" Decl. $-26^{\circ} 9' 5''$ Apparent magnitude: 2.89 Absolute magnitude: -2.85 Constellation: Scorpius	162. $\tau$ Puppis Section 3 RA 6h 50' 23.7" Decl. $-50^{\circ} 38' 14''$ Apparent magnitude: 2.94 Absolute magnitude: -0.8 Constellation: Puppis
147. $\delta$ Cygni Section 8 RA 19h 45' 33.2" Decl. $45^{\circ} 10' 3''$ Apparent magnitude: 2.86 Absolute magnitude: -0.74 Constellation: Cygnus	155. $\epsilon$ Persei Section 2 RA 3h 59' 6.1" Decl. $40^{\circ} 3' 4''$ Apparent magnitude: 2.9 Absolute magnitude: -3.19 Constellation: Perseus	163. Algorel Section 5 RA 12h 30' 49.4" Decl. $-16^{\circ} 37' 0''$ Apparent magnitude: 2.94 Absolute magnitude: 0.79 Constellation: Corvus
148. Tejat Section 3 RA 6h 24' 4.8" Decl. $22^{\circ} 30' 0''$ Apparent magnitude: 2.87v Absolute magnitude: -1.39v Constellation: Gemini	156. Alniyat Section 6 RA 16h 22' 19" Decl. $-25^{\circ} 38' 0''$ Apparent magnitude: 2.9v Absolute magnitude: -3.86v Constellation: Scorpius	164. Sadalmelik Section 8 RA 22h 6' 44" Decl. $0^{\circ} 13' 4''$ Apparent magnitude: 2.95 Absolute magnitude: -3.88 Constellation: Aquarius
149. $\gamma$ Trianguli Australis Section 6 RA 15h 18' 54.582" Decl. $-68^{\circ} 40' 46.3654''$ Apparent magnitude: 2.87 Absolute magnitude: -0.87 Constellation: Triangulum Australe	157. Albireo Section 8 RA 19h 31' 28.1" Decl. $27^{\circ} 59' 5''$ Apparent magnitude: 2.9 Absolute magnitude: -2.31 Constellation: Cygnus	165. Zaurak Section 2 RA 3h 58' 53.6" Decl. $-13^{\circ} 27' 2''$ Apparent magnitude: 2.97 Absolute magnitude: -1.19 Constellation: Eridanus
150. $\alpha$ Tucanæ Section 8 RA 22h 19' 45.2" Decl. $-60^{\circ} 10' 0''$ Apparent magnitude: 2.87 Absolute magnitude: -1.05 Constellation: Tucana	158. Sadalsuud Section 8 RA 21h 32' 31.9" Decl. $-5^{\circ} 29' 2''$ Apparent magnitude: 2.9 Absolute magnitude: -3.47 Constellation: Aquarius	166. Alheka Section 3 RA 5h 38' 45.1" Decl. $21^{\circ} 9' 0''$ Apparent magnitude: 2.97 Absolute magnitude: -2.56 Constellation: Taurus
151. Acamar Section 2 RA 2h 58' 15.6792" Decl. $-40^{\circ} 18' 16.8457''$ Apparent magnitude: 2.88 Absolute magnitude: -0.59 Constellation: Eridanus	159. $\gamma$ Persei Section 2 RA 3h 6' 8.9" Decl. $53^{\circ} 34' 3''$ Apparent magnitude: 2.91 Absolute magnitude: -1.57 Constellation: Perseus	167. Ras Elased Australis Section 4 RA 9h 46' 53.9" Decl. $23^{\circ} 41' 1''$ Apparent magnitude: 2.97 Absolute magnitude: -1.46 Constellation: Leo
152. Albaldah Section 7 RA 19h 10' 51.8" Decl. $-20^{\circ} 59' 3''$ Apparent magnitude: 2.88 Absolute magnitude: -2.77 Constellation: Sagittarius	160. $\nu$ Carinæ Section 4 RA 9h 47' 33.8" Decl. $-65^{\circ} 9' 29''$ Apparent magnitude: 2.92 Absolute magnitude: -5.56 Constellation: Carina	168. Alnasl Section 7 RA 18h 6' 59.8" Decl. $-30^{\circ} 25' 2''$ Apparent magnitude: 2.98 Absolute magnitude: 0.63 Constellation: Sagittarius

169.  $\gamma$  Hydræ  
 Section 5  
 RA 13h 19' 55.9"  
 Decl.  $-23^{\circ} 16' 0''$   
 Apparent magnitude: 2.99  
 Absolute magnitude: -0.05  
 Constellation: Hydra

170.  $\iota^1$  Scorpïi  
 Section 7  
 RA 17h 48' 52.8"  
 Decl.  $-40^{\circ} 7' 56''$   
 Apparent magnitude: 2.99  
 Absolute magnitude: -5.71  
 Constellation: Scorpïus

171. Deneb el Okab  
 Section 7  
 RA 19h 6' 15.6"  
 Decl.  $13^{\circ} 53' 3''$   
 Apparent magnitude: 2.99  
 Absolute magnitude: 0.96  
 Constellation: Aquila

172.  $\beta$  Trianguli  
 Section 2  
 RA 2h 10' 39.1"  
 Decl.  $35^{\circ} 4' 2''$   
 Apparent magnitude: 3  
 Absolute magnitude: 0.09  
 Constellation: Triangulum

173.  $\psi$  Ursæ Majoris  
 Section 5  
 RA 11h 10' 41.8"  
 Decl.  $44^{\circ} 23' 5''$   
 Apparent magnitude: 3  
 Absolute magnitude: -0.27  
 Constellation: Ursa Major

174. Pherkad Major  
 Section 6  
 RA 15h 20' 42.8"  
 Decl.  $71^{\circ} 46' 0''$   
 Apparent magnitude: 3  
 Absolute magnitude: -2.84  
 Constellation: Ursa Minor

175.  $\mu^1$  Scorpïi  
 Section 7  
 RA 16h 53' 7.6"  
 Decl.  $-38^{\circ} 4' 39''$   
 Apparent magnitude: 3  
 Absolute magnitude: -4.01  
 Constellation: Scorpïus

176.  $\gamma$  Gruis  
 Section 8  
 RA 21h 55' 2.6"  
 Decl.  $-37^{\circ} 16' 37''$   
 Apparent magnitude: 3  
 Absolute magnitude: -0.97  
 Constellation: Grus

177.  $\delta$  Persei  
 Section 2  
 RA 3h 44' 15"  
 Decl.  $47^{\circ} 50' 4''$   
 Apparent magnitude: 3.01  
 Absolute magnitude: -3.04  
 Constellation: Perseus

178. Phurad  
 Section 3  
 RA 6h 21' 1.4"  
 Decl.  $-30^{\circ} 4' 2''$   
 Apparent magnitude: 3.02  
 Absolute magnitude: -2.05  
 Constellation: Canis Major

179.  $\sigma^2$  Canis Majoris  
 Section 3  
 RA 7h 3' 1.47211"  
 Decl.  $-23^{\circ} 49' 59.8523''$   
 Apparent magnitude: 3.02  
 Absolute magnitude: -6.46  
 Constellation: Canis Major

180. Minkar  
 Section 5  
 RA 12h 11' 4.7"  
 Decl.  $-22^{\circ} 43' 2''$   
 Apparent magnitude: 3.02  
 Absolute magnitude: -1.82  
 Constellation: Corvus

181. Almaaz  
 Section 3  
 RA 5h 3' 18"  
 Decl.  $43^{\circ} 50' 5''$   
 Apparent magnitude: 3.03  
 Absolute magnitude: -5.95  
 Constellation: Auriga

182.  $\beta$  Muscæ  
 Section 5  
 RA 12h 47' 26.1"  
 Decl.  $-68^{\circ} 12' 32''$   
 Apparent magnitude: 3.04  
 Absolute magnitude: -1.86  
 Constellation: Musca

183. Seginus  
 Section 6  
 RA 14h 32' 49.3"  
 Decl.  $38^{\circ} 13' 4''$   
 Apparent magnitude: 3.04  
 Absolute magnitude: 0.96  
 Constellation: Boötes

184. Dabih  
 Section 8  
 RA 20h 22' 2.9"  
 Decl.  $-14^{\circ} 43' 1''$   
 Apparent magnitude: 3.05  
 Absolute magnitude: -2.07  
 Constellation: Capricornus

185. Mebsuta  
 Section 3  
 RA 6h 45' 4.2"  
 Decl.  $25^{\circ} 6' 4''$   
 Apparent magnitude: 3.06  
 Absolute magnitude: -4.15  
 Constellation: Gemini

186. Tania Australis  
 Section 4  
 RA 10h 23' 25.5"  
 Decl.  $41^{\circ} 24' 2''$   
 Apparent magnitude: 3.06  
 Absolute magnitude: -1.35  
 Constellation: Ursa Major

187. Tais  
 Section 7  
 RA 19h 12' 33.3"  
 Decl.  $67^{\circ} 41' 3''$   
 Apparent magnitude: 3.07  
 Absolute magnitude: 0.63  
 Constellation: Draco

188.  $\eta$  Sagittarii  
 Section 7  
 RA 18h 18' 52.7"  
 Decl.  $-36^{\circ} 45' 16''$   
 Apparent magnitude: 3.1  
 Absolute magnitude: -0.2  
 Constellation: Sagittarius

189.  $\zeta$  Hydræ  
 Section 4  
 RA 8h 56' 22.2"  
 Decl.  $5^{\circ} 52' 2''$   
 Apparent magnitude: 3.11  
 Absolute magnitude: -0.21  
 Constellation: Hydra

190.  $\nu$  Hydræ  
 Section 5  
 RA 10h 50' 32.3"  
 Decl.  $-16^{\circ} 17' 27''$   
 Apparent magnitude: 3.11  
 Absolute magnitude: -0.03  
 Constellation: Hydra

191.  $\lambda$  Centauri  
 Section 5  
 RA 11h 36' 38.6"  
 Decl.  $-63^{\circ} 7' 20''$   
 Apparent magnitude: 3.11  
 Absolute magnitude: -2.39  
 Constellation: Centaurus

192. Persian  
 Section 8  
 RA 20h 38' 51.6"  
 Decl.  $-47^{\circ} 13' 32''$   
 Apparent magnitude: 3.11  
 Absolute magnitude: 0.65  
 Constellation: Indus

193. Wazn  
 Section 3  
 RA 5h 51' 36.8"  
 Decl.  $-35^{\circ} 45' 44''$   
 Apparent magnitude: 3.12  
 Absolute magnitude: 1.02  
 Constellation: Columba

194. Talita  
 Section 4  
 RA 9h 0' 28"  
 Decl.  $47^{\circ} 58' 0''$   
 Apparent magnitude: 3.12  
 Absolute magnitude: 2.29  
 Constellation: Ursa Major

195.  $\zeta$  Aræ  
 Section 7  
 RA 17h 0' 9.4"  
 Decl.  $-56^{\circ} 1' 2''$   
 Apparent magnitude: 3.12  
 Absolute magnitude: -3.11  
 Constellation: Ara

196. Sarin  
 Section 7  
 RA 17h 15' 47.5"  
 Decl.  $24^{\circ} 49' 0''$   
 Apparent magnitude: 3.12  
 Absolute magnitude: 1.21  
 Constellation: Hercules

197. Ke Kwan  
 Section 6  
 RA 15h 0' 22.3"  
 Decl.  $-42^{\circ} 10' 38''$   
 Apparent magnitude: 3.13  
 Absolute magnitude: -2.96  
 Constellation: Centaurus

198.  $\alpha$  Lyncis  
 Section 4  
 RA 9h 22' 10.6"  
 Decl.  $34^{\circ} 18' 4''$   
 Apparent magnitude: 3.14  
 Absolute magnitude: -1.02  
 Constellation: Lynx

199. N Velorum  
 Section 4  
 RA 9h 31' 13.3189"  
 Decl.  $-57^{\circ} 2' 3.7578''$   
 Apparent magnitude: 3.16  
 Absolute magnitude: -1.15  
 Constellation: Vela

200.  $\pi$  Herculis  
 Section 7  
 RA 17h 15' 41.5"  
 Decl.  $36^{\circ} 47' 2''$   
 Apparent magnitude: 3.16  
 Absolute magnitude: -2.1  
 Constellation: Hercules

## Stars According to Section (RA)

### Section 1

#### RA 22h 30m–1h 30m

18. Fomalhaut

Section 1

RA 22h 57' 39.0465"

Decl.  $-29^{\circ} 37' 20.05''$

Apparent magnitude: 1.15

Absolute magnitude: 1.72

Constellation: Piscis Austrinus

51. Diphda

Section 1

RA 0h 44' 31"

Decl.  $-17^{\circ} 53' 0''$

Apparent magnitude: 2.04

Absolute magnitude: -0.3

Constellation: Cetus

54. Alpheratz

Section 1

RA 0h 9' 20.9"

Decl.  $29^{\circ} 11' 3''$

Apparent magnitude: 2.07

Absolute magnitude: -0.3

Constellation: Andromeda

55. Mirach

Section 1

RA 1h 10' 46.4"

Decl.  $35^{\circ} 43' 0''$

Apparent magnitude: 2.07

Absolute magnitude: -1.86

Constellation: Andromeda

58. Al Dhanab

Section 1

RA 22h 43' 45.8"

Decl.  $-46^{\circ} 47' 14''$

Apparent magnitude: 2.07v

Absolute magnitude: 1.52

Constellation: Grus

63. Cih

Section 1

RA 0h 57' 50.4"

Decl.  $60^{\circ} 48' 5''$

Apparent magnitude: 2.15v

Absolute magnitude: -4.22

Constellation: Cassiopeia

71. Schedar

Section 1

RA 0h 41' 34.1"

Decl.  $56^{\circ} 38' 1''$

Apparent magnitude: 2.24

Absolute magnitude: -1.99

Constellation: Cassiopeia

74. Caph

Section 1

RA 0h 10' 10.6"

Decl.  $59^{\circ} 15' 0''$

Apparent magnitude: 2.28

Absolute magnitude: 1.17

Constellation: Cassiopeia

84. Ankaa

Section 1

RA 0h 27' 11.7"

Decl.  $-42^{\circ} 12' 20''$

Apparent magnitude: 2.4

Absolute magnitude: 0.52

Constellation: Phoenix

87. Scheat

Section 1

RA 23h 4' 40.4"

Decl.  $28^{\circ} 11' 0''$

Apparent magnitude: 2.44v

Absolute magnitude: -1.49

Constellation: Pegasus

92. Markab

Section 1

RA 23h 5' 41"

Decl.  $15^{\circ} 18' 1''$

Apparent magnitude: 2.49

Absolute magnitude: -0.67

Constellation: Pegasus

109. Ruchbah

Section 1

RA 1h 27' 2.5"

Decl.  $60^{\circ} 19' 5''$

Apparent magnitude: 2.66

Absolute magnitude: 0.24

Constellation: Cassiopeia

134.  $\beta$  Hydri

Section 1

RA 0h 26' 41.9"

Decl.  $-77^{\circ} 9' 1''$

Apparent magnitude: 2.82

Absolute magnitude: 3.45

Constellation: Hydrus

137. Algenib

Section 1

RA 0h 14' 11.4"

Decl.  $15^{\circ} 17' 1''$

Apparent magnitude: 2.83

Absolute magnitude: -2.22

Constellation: Pegasus

161. Matar

Section 1

RA 22h 43' 52.3"

Decl.  $30^{\circ} 19' 0''$

Apparent magnitude: 2.93

Absolute magnitude: -1.16

Constellation: Pegasus

### Section 2

#### RA 1h 30m–4h 30m

9. Achernar

Section 2

RA 1h 38' 24"

Decl.  $-57^{\circ} 8' 36''$

Apparent magnitude: 0.45

Absolute magnitude: -2.77

Constellation: Eridanus

33. Mirfak

Section 2

RA 3h 25' 39.2"

Decl.  $49^{\circ} 55' 3''$

Apparent magnitude: 1.8

Absolute magnitude: -4.49

Constellation: Perseus

50. Hamal

Section 2

RA 2h 8' 13.2"

Decl.  $23^{\circ} 32' 5''$

Apparent magnitude: 2.01

Absolute magnitude: 0.48

Constellation: Aries

60. Algol

Section 2

RA 3h 9' 22.8"

Decl.  $41^{\circ} 1' 3''$

Apparent magnitude: 2.09

Absolute magnitude: 0.18

Constellation: Perseus

61. Almach

Section 2

RA 2h 3' 53.9523"

Decl.  $42^{\circ} 19' 47.0223''$

Apparent magnitude: 2.1

Absolute magnitude: -3.08

Constellation: Andromeda

93. Menkar

Section 2

RA 3h 3' 14.9"

Decl.  $4^{\circ} 9' 4''$

Apparent magnitude: 2.54

Absolute magnitude: -1.61

Constellation: Cetus

104. Sheratan  
Section 2  
RA 1h 55' 40"  
Decl. 20° 53' 5"  
Apparent magnitude: 2.64  
Absolute magnitude: 1.33  
Constellation: Aries

140.  $\zeta$  Persei  
Section 2  
RA 3h 55' 18"  
Decl. 31° 56' 1"  
Apparent magnitude: 2.84  
Absolute magnitude: -4.55  
Constellation: Perseus

143. Alcyone  
Section 2  
RA 3h 48' 35.3"  
Decl. 24° 9' 4"  
Apparent magnitude: 2.85  
Absolute magnitude: -2.41  
Constellation: Taurus

146.  $\alpha$  Hydri  
Section 2  
RA 1h 59' 21.1"  
Decl. -61° 28' 49"  
Apparent magnitude: 2.86  
Absolute magnitude: 1.16  
Constellation: Hydrus

151. Acamar  
Section 2  
RA 2h 58' 15.6792"  
Decl. -40° 18' 16.8457"  
Apparent magnitude: 2.88  
Absolute magnitude: -0.59  
Constellation: Eridanus

155.  $\epsilon$  Persei  
Section 2  
RA 3h 59' 6.1"  
Decl. 40° 3' 4"  
Apparent magnitude: 2.9  
Absolute magnitude: -3.19  
Constellation: Perseus

159.  $\gamma$  Persei  
Section 2  
RA 3h 6' 8.9"  
Decl. 53° 34' 3"  
Apparent magnitude: 2.91  
Absolute magnitude: -1.57  
Constellation: Perseus

165. Zaurak  
Section 2  
RA 3h 58' 53.6"  
Decl. -13° 27' 2"  
Apparent magnitude: 2.97  
Absolute magnitude: -1.19  
Constellation: Eridanus

172.  $\beta$  Trianguli  
Section 2  
RA 2h 10' 39.1"  
Decl. 35° 4' 2"  
Apparent magnitude: 3  
Absolute magnitude: 0.09  
Constellation: Triangulum

177.  $\delta$  Persei  
Section 2  
RA 3h 44' 15"  
Decl. 47° 50' 4"  
Apparent magnitude: 3.01  
Absolute magnitude: -3.04  
Constellation: Perseus

## Section 3

### RA 4h 30m–7h 30m

1. Sirius  
Section 3  
RA 6h 45' 57.4"  
Decl. -16° 44' 3"  
Apparent magnitude: -1.46  
Absolute magnitude: 1.43  
Constellation: Canis Major

2. Canopus  
Section 3  
RA 6h 24' 21.8"  
Decl. -52° 42' 23"  
Apparent magnitude: -0.73  
Absolute magnitude: -5.64  
Constellation: Carina

6. Capella  
Section 3  
RA 5h 18' 3.5"  
Decl. 46° 0' 5"  
Apparent magnitude: 0.07  
Absolute magnitude: -0.49  
Constellation: Auriga

7. Rigel  
Section 3  
RA 5h 15' 25.7"  
Decl. -8° 10' 5"  
Apparent magnitude: 0.15v  
Absolute magnitude: -6.72v  
Constellation: Orion

10. Betelgeuse  
Section 3  
RA 5h 56' 10.4"  
Decl. 7° 24' 3"  
Apparent magnitude: 0.55v  
Absolute magnitude: -5.04v  
Constellation: Orion

14. Aldebaran  
Section 3  
RA 4h 36' 59.1"  
Decl. 16° 32' 4"  
Apparent magnitude: 0.86v  
Absolute magnitude: -0.64v  
Constellation: Taurus

22. Adhara  
Section 3  
RA 6h 59' 21.2"  
Decl. -28° 59' 5"  
Apparent magnitude: 1.5  
Absolute magnitude: -4.1  
Constellation: Canis Major

26. Bellatrix  
Section 3  
RA 5h 26' 7.5"  
Decl. 6° 21' 5"  
Apparent magnitude: 1.64  
Absolute magnitude: -2.72  
Constellation: Orion

27. Elnath  
Section 3  
RA 5h 27' 27.8"  
Decl. 28° 37' 1"  
Apparent magnitude: 1.66  
Absolute magnitude: -1.36  
Constellation: Taurus

29. Alnilam  
Section 3  
RA 5h 37' 9.2"  
Decl. -1° 11' 2"  
Apparent magnitude: 1.69  
Absolute magnitude: -6.38  
Constellation: Orion

31. Alnitak  
Section 3  
RA 5h 41' 41.6"  
Decl. -1° 56' 0"  
Apparent magnitude: 1.75  
Absolute magnitude: -5.25  
Constellation: Orion

36. Wezen  
Section 3  
RA 7h 9' 8.6"  
Decl. -26° 25' 2"  
Apparent magnitude: 1.83  
Absolute magnitude: -6.87  
Constellation: Canis Major

41. Menkalinan  
Section 3  
RA 6h 0' 53.2"  
Decl. 44° 56' 5"  
Apparent magnitude: 1.9  
Absolute magnitude: -0.1  
Constellation: Auriga

43. Alhena  
Section 3  
RA 6h 38' 46.8"  
Decl. 16° 22' 5"  
Apparent magnitude: 1.93  
Absolute magnitude: -0.6  
Constellation: Gemini

46. Mirzam  
Section 3  
RA 6h 23' 30.9"  
Decl. -17° 57' 5"  
Apparent magnitude: 1.98  
Absolute magnitude: -3.95  
Constellation: Canis Major

56. Saiph  
Section 3  
RA 5h 48' 38.1"  
Decl. -9° 39' 5"  
Apparent magnitude: 2.07  
Absolute magnitude: -4.65  
Constellation: Orion

73. Mintaka  
Section 3  
RA 5h 32' 57.2"  
Decl. 0° 17' 1"  
Apparent magnitude: 2.25  
Absolute magnitude: -4.99  
Constellation: Orion

88. Aludra  
Section 3  
RA 7h 24' 49.6"  
Decl. -29° 20' 2"  
Apparent magnitude: 2.45  
Absolute magnitude: -7.51  
Constellation: Canis Major

98. Arneb  
Section 3  
RA 5h 33' 32.8"  
Decl. -17° 48' 3"  
Apparent magnitude: 2.58  
Absolute magnitude: -5.4  
Constellation: Lepus

106. Phact  
Section 3  
RA 5h 40' 19.2"  
Decl. -34° 3' 55"  
Apparent magnitude: 2.65  
Absolute magnitude: -1.93  
Constellation: Columba

107.  $\theta$  Aurigæ  
Section 3  
RA 6h 0' 59"  
Decl. 37° 12' 4"  
Apparent magnitude: 2.65  
Absolute magnitude: -0.98  
Constellation: Auriga

112. Hassaleh  
Section 3  
RA 4h 58' 12.1"  
Decl. 33° 11' 3"  
Apparent magnitude: 2.69  
Absolute magnitude: -3.29  
Constellation: Auriga

116.  $\pi$  Puppis  
Section 3  
RA 7h 17' 47.8"  
Decl. -37° 7' 54"  
Apparent magnitude: 2.71  
Absolute magnitude: -4.92  
Constellation: Puppis

123. Hatysa  
Section 3  
RA 5h 36' 20.3"  
Decl. -5° 53' 5"  
Apparent magnitude: 2.75  
Absolute magnitude: -5.3  
Constellation: Orion

126. Kursa  
Section 3  
RA 5h 8' 45.6"  
Decl. -5° 3' 5"  
Apparent magnitude: 2.78  
Absolute magnitude: 0.6  
Constellation: Eridanus

132. Nihal  
Section 3  
RA 5h 29' 2.3"  
Decl. -20° 44' 4"  
Apparent magnitude: 2.81  
Absolute magnitude: -0.63  
Constellation: Lepus

148. Tejat  
Section 3  
RA 6h 24' 4.8"  
Decl. 22° 30' 0"  
Apparent magnitude: 2.87v  
Absolute magnitude: -1.39v  
Constellation: Gemini

153. Gomeisa  
Section 3  
RA 7h 28' 9.2"  
Decl. 8° 15' 0"  
Apparent magnitude: 2.89  
Absolute magnitude: -0.7  
Constellation: Canis Minor

162.  $\tau$  Puppis  
Section 3  
RA 6h 50' 23.7"  
Decl. -50° 38' 14"  
Apparent magnitude: 2.94  
Absolute magnitude: -0.8  
Constellation: Puppis

166. Alheka  
Section 3  
RA 5h 38' 45.1"  
Decl. 21° 9' 0"  
Apparent magnitude: 2.97  
Absolute magnitude: -2.56  
Constellation: Taurus

178. Phurad  
Section 3  
RA 6h 21' 1.4"  
Decl. -30° 4' 2"  
Apparent magnitude: 3.02  
Absolute magnitude: -2.05  
Constellation: Canis Major

179.  $\alpha^2$  Canis Majoris  
Section 3  
RA 7h 3' 1.47211"  
Decl. -23° 49' 59.8523"  
Apparent magnitude: 3.02  
Absolute magnitude: -6.46  
Constellation: Canis Major

181. Almaaz  
Section 3  
RA 5h 3' 18"  
Decl. 43° 50' 5"  
Apparent magnitude: 3.03  
Absolute magnitude: -5.95  
Constellation: Auriga

185. Mebsuta  
Section 3  
RA 6h 45' 4.2"  
Decl. 25° 6' 4"  
Apparent magnitude: 3.06  
Absolute magnitude: -4.15  
Constellation: Gemini

193. Wazn  
Section 3  
RA 5h 51' 36.8"  
Decl. -35° 45' 44"  
Apparent magnitude: 3.12  
Absolute magnitude: 1.02  
Constellation: Columba

## Section 4

### RA 7h 30m–10h 30m

8. Procyon  
Section 4  
RA 7h 40' 16.3"  
Decl. 5° 10' 3"  
Apparent magnitude: 0.36  
Absolute magnitude: 2.64  
Constellation: Canis Minor

17. Pollux  
Section 4  
RA 7h 46' 26.7"  
Decl. 27° 58' 4"  
Apparent magnitude: 1.14  
Absolute magnitude: 1.07  
Constellation: Gemini

21. Regulus  
Section 4  
RA 10h 9' 21.3"  
Decl. 11° 52' 3"  
Apparent magnitude: 1.36  
Absolute magnitude: -0.52  
Constellation: Leo

23. Castor  
Section 4  
RA 7h 34' 35.863"  
Decl. 31° 53' 17.79"  
Apparent magnitude: 1.58  
Absolute magnitude: 0.59  
Constellation: Gemini

28. Miaplacidus  
Section 4  
RA 9h 13' 23.7"  
Decl. -69° 47' 37"  
Apparent magnitude: 1.67  
Absolute magnitude: -0.99  
Constellation: Carina

35. Regor  
Section 4  
RA 8h 9' 31.9501"  
Decl. -47° 20' 11.7108"  
Apparent magnitude: 1.81  
Absolute magnitude: -5.25  
Constellation: Vela

40. Avior  
Section 4  
RA 8h 22' 53.5"  
Decl. -59° 34' 10"  
Apparent magnitude: 1.87  
Absolute magnitude: -4.57  
Constellation: Carina

45. Koo She  
Section 4  
RA 8h 45' 12.9"  
Decl. -54° 46' 38"  
Apparent magnitude: 1.95  
Absolute magnitude: 0.01  
Constellation: Vela

47. Alphard  
Section 4  
RA 9h 28' 29.8"  
Decl. -8° 44' 2"  
Apparent magnitude: 1.98  
Absolute magnitude: -1.7  
Constellation: Hydra

49. Algieba  
Section 4  
RA 10h 19' 58.3506"  
Decl. 19° 50' 29.3468"  
Apparent magnitude: 2  
Absolute magnitude: -0.93  
Constellation: Leo

65. Naos  
Section 4  
RA 8h 4' 14.1"  
Decl. -40° 3' 22"  
Apparent magnitude: 2.21  
Absolute magnitude: -5.95  
Constellation: Puppis

66. Aspidiske  
Section 4  
RA 9h 17' 35.1"  
Decl. -59° 21' 12"  
Apparent magnitude: 2.21v  
Absolute magnitude: -4.42  
Constellation: Carina

68. Suhail  
Section 4  
RA 9h 8' 40.7"  
Decl. -43° 30' 29"  
Apparent magnitude: 2.23  
Absolute magnitude: -3.99  
Constellation: Vela

90. Markeb  
Section 4  
RA 9h 22' 41.2"  
Decl. -55° 5' 25"  
Apparent magnitude: 2.47  
Absolute magnitude: -3.62  
Constellation: Vela

138. Turais  
Section 4  
RA 8h 8' 19.9"  
Decl. -24° 21' 3"  
Apparent magnitude: 2.83  
Absolute magnitude: 1.41  
Constellation: Puppis

160.  $\nu$  Carinae  
Section 4  
RA 9h 47' 33.8"  
Decl. -65° 9' 29"  
Apparent magnitude: 2.92  
Absolute magnitude: -5.56  
Constellation: Carina

167. Ras Elased Australis  
Section 4  
RA 9h 46' 53.9"  
Decl. 23° 41' 1"  
Apparent magnitude: 2.97  
Absolute magnitude: -1.46  
Constellation: Leo

186. Tania Australis  
Section 4  
RA 10h 23' 25.5"  
Decl. 41° 24' 2"  
Apparent magnitude: 3.06  
Absolute magnitude: -1.35  
Constellation: Ursa Major

189.  $\zeta$  Hydrae  
Section 4  
RA 8h 56' 22.2"  
Decl. 5° 52' 2"  
Apparent magnitude: 3.11  
Absolute magnitude: -0.21  
Constellation: Hydra

194. Talita  
Section 4  
RA 9h 0' 28"  
Decl. 47° 58' 0"  
Apparent magnitude: 3.12  
Absolute magnitude: 2.29  
Constellation: Ursa Major

198.  $\alpha$  Lyncis  
Section 4  
RA 9h 22' 10.6"  
Decl. 34° 18' 4"  
Apparent magnitude: 3.14  
Absolute magnitude: -1.02  
Constellation: Lynx

199. N Velorum  
Section 4  
RA 9h 31' 13.3189"  
Decl. -57° 2' 3.7578"  
Apparent magnitude: 3.16  
Absolute magnitude: -1.15  
Constellation: Vela

## Section 5

### RA 10h 30m–13h 30m

16. Spica  
Section 5  
RA 13h 26' 10.2"  
Decl. -11° 15' 2"  
Apparent magnitude: 0.97  
Absolute magnitude: -3.56  
Constellation: Virgo

20. Mimosa  
Section 5  
RA 12h 48' 48.9"  
Decl. -59° 47' 22"  
Apparent magnitude: 1.26  
Absolute magnitude: -3.91  
Constellation: Crux

25. Gacrux  
Section 5  
RA 12h 32' 12.2"  
Decl.  $-57^{\circ} 13' 0''$   
Apparent magnitude: 1.63  
Absolute magnitude: -0.52  
Constellation: Crux

32. Alioth  
Section 5  
RA 12h 54' 50.3"  
Decl.  $55^{\circ} 51' 3''$   
Apparent magnitude: 1.77  
Absolute magnitude: -0.2  
Constellation: Ursa Major

34. Dubhe  
Section 5  
RA 11h 4' 51.2"  
Decl.  $61^{\circ} 39' 0''$   
Apparent magnitude: 1.8  
Absolute magnitude: -1.09  
Constellation: Ursa Major

62. Denebola  
Section 5  
RA 11h 50' 0.1"  
Decl.  $14^{\circ} 28' 0''$   
Apparent magnitude: 2.14  
Absolute magnitude: 1.92  
Constellation: Leo

64. Muhlifain  
Section 5  
RA 12h 42' 32.8"  
Decl.  $-49^{\circ} 3' 40''$   
Apparent magnitude: 2.2  
Absolute magnitude: -0.81  
Constellation: Centaurus

69. Mizar  
Section 5  
RA 13h 24' 40.1"  
Decl.  $54^{\circ} 49' 4''$   
Apparent magnitude: 2.23  
Absolute magnitude: 0.33  
Constellation: Ursa Major

80. Merak  
Section 5  
RA 11h 2' 56.8"  
Decl.  $56^{\circ} 16' 5''$   
Apparent magnitude: 2.34  
Absolute magnitude: 0.41  
Constellation: Ursa Major

85. Phecda  
Section 5  
RA 11h 54' 47.8"  
Decl.  $53^{\circ} 35' 3''$   
Apparent magnitude: 2.41  
Absolute magnitude: 0.36  
Constellation: Ursa Major

96. Zosma  
Section 5  
RA 11h 15' 5.4"  
Decl.  $20^{\circ} 25' 1''$   
Apparent magnitude: 2.56  
Absolute magnitude: 1.32  
Constellation: Leo

99.  $\delta$  Centauri  
Section 5  
RA 12h 9' 19.5"  
Decl.  $-50^{\circ} 49' 31''$   
Apparent magnitude: 2.58v  
Absolute magnitude: -2.84  
Constellation: Centaurus

100. Gienah Ghurab  
Section 5  
RA 12h 16' 45.6"  
Decl.  $-17^{\circ} 38' 4''$   
Apparent magnitude: 2.58  
Absolute magnitude: -0.94  
Constellation: Corvus

108. Kraz  
Section 5  
RA 12h 35' 21.7"  
Decl.  $-23^{\circ} 29' 5''$   
Apparent magnitude: 2.65  
Absolute magnitude: -0.51  
Constellation: Corvus

113.  $\mu$  Velorum  
Section 5  
RA 10h 47' 34.2"  
Decl.  $-49^{\circ} 31' 6''$   
Apparent magnitude: 2.69  
Absolute magnitude: -0.06  
Constellation: Vela

114.  $\alpha$  Muscae  
Section 5  
RA 12h 38' 18.4"  
Decl.  $-69^{\circ} 14' 14''$   
Apparent magnitude: 2.69  
Absolute magnitude: -2.17  
Constellation: Musca

121.  $\theta$  Carinae  
Section 5  
RA 10h 43' 37.3"  
Decl.  $-64^{\circ} 29' 30''$   
Apparent magnitude: 2.74  
Absolute magnitude: -2.91  
Constellation: Carina

122. Porrima  
Section 5  
RA 12h 41' 39.6434"  
Decl.  $-1^{\circ} 26' 57.7421''$   
Apparent magnitude: 2.74  
Absolute magnitude: 2.38  
Constellation: Virgo

124.  $\iota$  Centauri  
Section 5  
RA 13h 21' 38.6"  
Decl.  $-36^{\circ} 48' 34''$   
Apparent magnitude: 2.75  
Absolute magnitude: 1.48  
Constellation: Centaurus

128.  $\delta$  Crucis  
Section 5  
RA 12h 16' 8.3"  
Decl.  $-58^{\circ} 51' 6''$   
Apparent magnitude: 2.79  
Absolute magnitude: -2.45  
Constellation: Crux

130. Cor Caroli 2  
Section 5  
RA 12h 56' 1.66622"  
Decl.  $38^{\circ} 19' 6.1541''$   
Apparent magnitude: 2.98v  
Absolute magnitude: 0.16  
Constellation: Canes Venatici

144. Vindemiatrix  
Section 5  
RA 13h 3' 5.9"  
Decl.  $10^{\circ} 51' 3''$   
Apparent magnitude: 2.85  
Absolute magnitude: 0.37  
Constellation: Virgo

163. Algorel  
Section 5  
RA 12h 30' 49.4"  
Decl.  $-16^{\circ} 37' 0''$   
Apparent magnitude: 2.94  
Absolute magnitude: 0.79  
Constellation: Corvus

169.  $\gamma$  Hydrae  
Section 5  
RA 13h 19' 55.9"  
Decl.  $-23^{\circ} 16' 0''$   
Apparent magnitude: 2.99  
Absolute magnitude: -0.05  
Constellation: Hydra

173.  $\psi$  Ursae Majoris  
Section 5  
RA 11h 10' 41.8"  
Decl.  $44^{\circ} 23' 5''$   
Apparent magnitude: 3  
Absolute magnitude: -0.27  
Constellation: Ursa Major

180. Minkar  
Section 5  
RA 12h 11' 4.7"  
Decl.  $-22^{\circ} 43' 2''$   
Apparent magnitude: 3.02  
Absolute magnitude: -1.82  
Constellation: Corvus



182.  $\beta$  Muscæ  
 Section 5  
 RA 12h 47' 26.1"  
 Decl.  $-68^{\circ} 12' 32''$   
 Apparent magnitude: 3.04  
 Absolute magnitude: -1.86  
 Constellation: Musca

190.  $\nu$  Hydræ  
 Section 5  
 RA 10h 50' 32.3"  
 Decl.  $-16^{\circ} 17' 27''$   
 Apparent magnitude: 3.11  
 Absolute magnitude: -0.03  
 Constellation: Hydra

191.  $\lambda$  Centauri  
 Section 5  
 RA 11h 36' 38.6"  
 Decl.  $-63^{\circ} 7' 20''$   
 Apparent magnitude: 3.11  
 Absolute magnitude: -2.39  
 Constellation: Centaurus

## Section 6

### RA 13h 30m–16h 30m

3.  $\alpha$  Centauri  
 Section 6  
 RA 14h 39' 35.0631"  
 Decl.  $-60^{\circ} 50' 15.0992''$   
 Apparent magnitude: -0.29  
 Absolute magnitude: 4.06  
 Constellation: Centaurus

4. Arcturus  
 Section 6  
 RA 14h 16' 30.3"  
 Decl.  $19^{\circ} 5' 1''$   
 Apparent magnitude: -0.05  
 Absolute magnitude: -0.31  
 Constellation: Boötes

11. Hadar  
 Section 6  
 RA 14h 5' 8.7"  
 Decl.  $-60^{\circ} 27' 41''$   
 Apparent magnitude: 0.61  
 Absolute magnitude: -5.42  
 Constellation: Centaurus

38. Alkaid  
 Section 6  
 RA 13h 48' 16.1"  
 Decl.  $49^{\circ} 13' 1''$   
 Apparent magnitude: 1.86  
 Absolute magnitude: -0.59  
 Constellation: Ursa Major

53. Menkent  
 Section 6  
 RA 14h 7' 46.7"  
 Decl.  $-36^{\circ} 27' 3''$   
 Apparent magnitude: 2.06  
 Absolute magnitude: 0.7  
 Constellation: Centaurus

57. Kochab  
 Section 6  
 RA 14h 50' 40.2"  
 Decl.  $74^{\circ} 4' 4''$   
 Apparent magnitude: 2.07  
 Absolute magnitude: -0.87  
 Constellation: Ursa Minor

67. Alphecca  
 Section 6  
 RA 15h 35' 28.3"  
 Decl.  $26^{\circ} 39' 1''$   
 Apparent magnitude: 2.22  
 Absolute magnitude: 0.42  
 Constellation: Corona Borealis

75.  $\epsilon$  Centauri  
 Section 6  
 RA 13h 41' 4.3"  
 Decl.  $-53^{\circ} 33' 35''$   
 Apparent magnitude: 2.29  
 Absolute magnitude: -3.02  
 Constellation: Centaurus

76. Dschubba  
 Section 6  
 RA 16h 1' 25.8"  
 Decl.  $-22^{\circ} 40' 2''$   
 Apparent magnitude: 2.29  
 Absolute magnitude: -3.16  
 Constellation: Scorpius

78. Men  
 Section 6  
 RA 14h 43' 10.1"  
 Decl.  $-47^{\circ} 27' 59''$   
 Apparent magnitude: 2.3  
 Absolute magnitude: -3.83  
 Constellation: Lupus

79.  $\eta$  Centauri  
 Section 6  
 RA 14h 36' 41.4"  
 Decl.  $-42^{\circ} 14' 17''$   
 Apparent magnitude: 2.33v  
 Absolute magnitude: -2.55  
 Constellation: Centaurus

81. Izar  
 Section 6  
 RA 14h 45' 47.7"  
 Decl.  $26^{\circ} 59' 4''$   
 Apparent magnitude: 2.35  
 Absolute magnitude: -1.69  
 Constellation: Boötes

95.  $\zeta$  Centauri  
 Section 6  
 RA 13h 56' 42.2"  
 Decl.  $-47^{\circ} 22' 43''$   
 Apparent magnitude: 2.55  
 Absolute magnitude: -2.81  
 Constellation: Centaurus

102. Zubeneshchamali  
 Section 6  
 RA 15h 18' 0.3"  
 Decl.  $-9^{\circ} 27' 0''$   
 Apparent magnitude: 2.61  
 Absolute magnitude: -0.84  
 Constellation: Libra

103. Unukalhai  
 Section 6  
 RA 15h 45' 10.8"  
 Decl.  $6^{\circ} 22' 0''$   
 Apparent magnitude: 2.63  
 Absolute magnitude: 0.87  
 Constellation: Serpens

105. Zubenelgenubi  
 Section 6  
 RA 14h 50' 52.7131"  
 Decl.  $-16^{\circ} 2' 30.3955''$   
 Apparent magnitude: 2.64  
 Absolute magnitude: 0.77  
 Constellation: Libra

110. Muphrid  
 Section 6  
 RA 13h 55' 33.9"  
 Decl.  $18^{\circ} 18' 2''$   
 Apparent magnitude: 2.68  
 Absolute magnitude: 2.41  
 Constellation: Boötes

111. Ke Kouan  
 Section 6  
 RA 14h 59' 45.1"  
 Decl.  $-43^{\circ} 12' 26''$   
 Apparent magnitude: 2.68  
 Absolute magnitude: -3.35  
 Constellation: Lupus

119. Yed Prior  
 Section 6  
 RA 16h 15' 19"  
 Decl.  $-3^{\circ} 44' 2''$   
 Apparent magnitude: 2.73  
 Absolute magnitude: -0.86  
 Constellation: Ophiuchus

120. Aldhibain  
 Section 6  
 RA 16h 24' 14.7"  
 Decl.  $61^{\circ} 28' 2''$   
 Apparent magnitude: 2.73  
 Absolute magnitude: 0.58  
 Constellation: Draco

131.  $\gamma$  Lupi

Section 6

RA 15h 36' 22.8"

Decl.  $-41^{\circ} 13' 39''$ 

Apparent magnitude: 2.8

Absolute magnitude: -3.4

Constellation: Lupus

139.  $\beta$  Trianguli Australis

Section 6

RA 15h 56' 47.3"

Decl.  $-63^{\circ} 29' 9''$ 

Apparent magnitude: 2.83

Absolute magnitude: 2.38

Constellation: Triangulum Australe

149.  $\gamma$  Trianguli Australis

Section 6

RA 15h 18' 54.582"

Decl.  $-68^{\circ} 40' 46.3654''$ 

Apparent magnitude: 2.87

Absolute magnitude: -0.87

Constellation: Triangulum Australe

154.  $\pi$  Scorpii

Section 6

RA 15h 59' 58.5"

Decl.  $-26^{\circ} 9' 5''$ 

Apparent magnitude: 2.89

Absolute magnitude: -2.85

Constellation: Scorpius

156. Alniyat

Section 6

RA 16h 22' 19"

Decl.  $-25^{\circ} 38' 0''$ 

Apparent magnitude: 2.9v

Absolute magnitude: -3.86v

Constellation: Scorpius

174. Pherkad Major

Section 6

RA 15h 20' 42.8"

Decl.  $71^{\circ} 46' 0''$ 

Apparent magnitude: 3

Absolute magnitude: -2.84

Constellation: Ursa Minor

183. Seginus

Section 6

RA 14h 32' 49.3"

Decl.  $38^{\circ} 13' 4''$ 

Apparent magnitude: 3.04

Absolute magnitude: 0.96

Constellation: Boötes

197. Ke Kwan

Section 6

RA 15h 0' 22.3"

Decl.  $-42^{\circ} 10' 38''$ 

Apparent magnitude: 3.13

Absolute magnitude: -2.96

Constellation: Centaurus

**Section 7****RA 16h 30m–19h 30m**

5. Vega

Section 7

RA 18h 37' 33.9"

Decl.  $38^{\circ} 48' 0''$ 

Apparent magnitude: 0.03

Absolute magnitude: 0.58

Constellation: Lyra

15. Antares

Section 7

RA 16h 30' 32.7"

Decl.  $-26^{\circ} 28' 1''$ 

Apparent magnitude: 0.95v

Absolute magnitude: -5.39v

Constellation: Scorpius

24. Shaula

Section 7

RA 17h 34' 52"

Decl.  $-37^{\circ} 6' 5''$ 

Apparent magnitude: 1.62

Absolute magnitude: -5.05

Constellation: Scorpius

37. Kaus Australis

Section 7

RA 18h 25' 24"

Decl.  $-34^{\circ} 22' 2''$ 

Apparent magnitude: 1.84

Absolute magnitude: -1.39

Constellation: Sagittarius

39. Sargas

Section 7

RA 17h 38' 39"

Decl.  $-43^{\circ} 0' 28''$ 

Apparent magnitude: 1.86

Absolute magnitude: -2.75

Constellation: Scorpius

42. Atria

Section 7

RA 16h 48' 39.8951"

Decl.  $-69^{\circ} 1' 39.7626''$ 

Apparent magnitude: 1.92

Absolute magnitude: -3.61

Constellation: Triangulum Australe

52. Nunki

Section 7

RA 18h 56' 24.7"

Decl.  $-26^{\circ} 16' 2''$ 

Apparent magnitude: 2.05

Absolute magnitude: -2.14

Constellation: Sagittarius

59. Rasalhague

Section 7

RA 17h 35' 47.6"

Decl.  $12^{\circ} 32' 5''$ 

Apparent magnitude: 2.08

Absolute magnitude: 1.3

Constellation: Ophiuchus

72. Eltanin

Section 7

RA 17h 57' 2.2"

Decl.  $51^{\circ} 29' 1''$ 

Apparent magnitude: 2.24

Absolute magnitude: -1.04

Constellation: Draco

77. Wei

Section 7

RA 16h 51' 21.9"

Decl.  $-34^{\circ} 19' 3''$ 

Apparent magnitude: 2.29

Absolute magnitude: 0.78

Constellation: Scorpius

83. Girtab

Section 7

RA 17h 43' 46.1"

Decl.  $-39^{\circ} 2' 16''$ 

Apparent magnitude: 2.39

Absolute magnitude: -3.38

Constellation: Scorpius

86. Sabik

Section 7

RA 17h 11' 26.4"

Decl.  $-15^{\circ} 44' 4''$ 

Apparent magnitude: 2.43

Absolute magnitude: 0.37

Constellation: Ophiuchus

94. Han

Section 7

RA 16h 38' 10.8"

Decl.  $-10^{\circ} 36' 1''$ 

Apparent magnitude: 2.54

Absolute magnitude: -3.2

Constellation: Ophiuchus

101. Ascella

Section 7

RA 19h 3' 47.2"

Decl.  $-29^{\circ} 51' 0''$ 

Apparent magnitude: 2.6

Absolute magnitude: 0.42

Constellation: Sagittarius

115. Lesath

Section 7

RA 17h 32' 1.4"

Decl.  $-37^{\circ} 18' 3''$ 

Apparent magnitude: 2.7

Absolute magnitude: -3.31

Constellation: Scorpius

117. Kaus Meridionalis  
Section 7  
RA 18h 22' 10.7"  
Decl.  $-29^{\circ} 49' 0''$   
Apparent magnitude: 2.72  
Absolute magnitude: -2.14  
Constellation: Sagittarius

125. Cebalrai  
Section 7  
RA 17h 44' 23.2"  
Decl.  $4^{\circ} 33' 3''$   
Apparent magnitude: 2.76  
Absolute magnitude: 0.76  
Constellation: Ophiuchus

127. Kornephoros  
Section 7  
RA 16h 31' 1"  
Decl.  $21^{\circ} 27' 0''$   
Apparent magnitude: 2.78  
Absolute magnitude: -0.5  
Constellation: Hercules

129. Rastaban  
Section 7  
RA 17h 30' 51.1"  
Decl.  $52^{\circ} 17' 1''$   
Apparent magnitude: 2.79  
Absolute magnitude: -2.43  
Constellation: Draco

133. Rutilicus  
Section 7  
RA 16h 41' 59.1"  
Decl.  $31^{\circ} 34' 1''$   
Apparent magnitude: 2.81  
Absolute magnitude: 2.64  
Constellation: Hercules

135.  $\tau$  Scorpii  
Section 7  
RA 16h 37' 2.2"  
Decl.  $-28^{\circ} 15' 1''$   
Apparent magnitude: 2.82  
Absolute magnitude: -2.78  
Constellation: Scorpius

136. Kaus Borealis  
Section 7  
RA 18h 29' 6.7"  
Decl.  $-25^{\circ} 24' 3''$   
Apparent magnitude: 2.82  
Absolute magnitude: 0.95  
Constellation: Sagittarius

141.  $\beta$  Arae  
Section 7  
RA 17h 26' 50.5"  
Decl.  $-55^{\circ} 32' 43''$   
Apparent magnitude: 2.84  
Absolute magnitude: -3.49  
Constellation: Ara

142. Choo  
Section 7  
RA 17h 33' 16.4"  
Decl.  $-49^{\circ} 53' 20''$   
Apparent magnitude: 2.84  
Absolute magnitude: -1.51  
Constellation: Ara

152. Albaldah  
Section 7  
RA 19h 10' 51.8"  
Decl.  $-20^{\circ} 59' 3''$   
Apparent magnitude: 2.88  
Absolute magnitude: -2.77  
Constellation: Sagittarius

168. Alnasl  
Section 7  
RA 18h 6' 59.8"  
Decl.  $-30^{\circ} 25' 2''$   
Apparent magnitude: 2.98  
Absolute magnitude: 0.63  
Constellation: Sagittarius

170.  $\iota^1$  Scorpii  
Section 7  
RA 17h 48' 52.8"  
Decl.  $-40^{\circ} 7' 56''$   
Apparent magnitude: 2.99  
Absolute magnitude: -5.71  
Constellation: Scorpius

171. Deneb el Okab  
Section 7  
RA 19h 6' 15.6"  
Decl.  $13^{\circ} 53' 3''$   
Apparent magnitude: 2.99  
Absolute magnitude: 0.96  
Constellation: Aquila

175.  $\mu^1$  Scorpii  
Section 7  
RA 16h 53' 7.6"  
Decl.  $-38^{\circ} 4' 39''$   
Apparent magnitude: 3  
Absolute magnitude: -4.01  
Constellation: Scorpius

187. Tais  
Section 7  
RA 19h 12' 33.3"  
Decl.  $67^{\circ} 41' 3''$   
Apparent magnitude: 3.07  
Absolute magnitude: 0.63  
Constellation: Draco

188.  $\eta$  Sagittarii  
Section 7  
RA 18h 18' 52.7"  
Decl.  $-36^{\circ} 45' 16''$   
Apparent magnitude: 3.1  
Absolute magnitude: -0.2  
Constellation: Sagittarius

195.  $\zeta$  Arae  
Section 7  
RA 17h 0' 9.4"  
Decl.  $-56^{\circ} 1' 2''$   
Apparent magnitude: 3.12  
Absolute magnitude: -3.11  
Constellation: Ara

196. Sarin  
Section 7  
RA 17h 15' 47.5"  
Decl.  $24^{\circ} 49' 0''$   
Apparent magnitude: 3.12  
Absolute magnitude: 1.21  
Constellation: Hercules

200.  $\pi$  Herculis  
Section 7  
RA 17h 15' 41.5"  
Decl.  $36^{\circ} 47' 2''$   
Apparent magnitude: 3.16  
Absolute magnitude: -2.1  
Constellation: Hercules

## Section 8

### RA 19h 30m–22h 30m

12. Altair  
Section 8  
RA 19h 51' 41.1"  
Decl.  $8^{\circ} 55' 0''$   
Apparent magnitude: 0.77  
Absolute magnitude: 2.21  
Constellation: Aquila

19. Deneb  
Section 8  
RA 20h 42' 3.8"  
Decl.  $45^{\circ} 20' 5''$   
Apparent magnitude: 1.24  
Absolute magnitude: -8.74  
Constellation: Cygnus

30. Alnair  
Section 8  
RA 22h 9' 23.4"  
Decl.  $-46^{\circ} 52' 14''$   
Apparent magnitude: 1.74  
Absolute magnitude: -0.72  
Constellation: Grus

44. Peacock  
Section 8  
RA 20h 27' 6"  
Decl.  $-56^{\circ} 40' 27''$   
Apparent magnitude: 1.93  
Absolute magnitude: -1.82  
Constellation: Pavo

70. Sadr  
 Section 8  
 RA 20h 22' 53.6"  
 Decl. 40° 19' 0"  
 Apparent magnitude: 2.23  
 Absolute magnitude: -6.12  
 Constellation: Cygnus

82. Enif  
 Section 8  
 RA 21h 45' 5.7"  
 Decl. 9° 57' 3"  
 Apparent magnitude: 2.38  
 Absolute magnitude: -4.19  
 Constellation: Pegasus

89. Alderamin  
 Section 8  
 RA 21h 19' 1.2"  
 Decl. 62° 39' 5"  
 Apparent magnitude: 2.45  
 Absolute magnitude: 1.58  
 Constellation: Cepheus

91. Gienah  
 Section 8  
 RA 20h 46' 57.6"  
 Decl. 34° 2' 2"  
 Apparent magnitude: 2.48  
 Absolute magnitude: 0.76  
 Constellation: Cygnus

118. Tarazed  
 Section 8  
 RA 19h 47' 8.3"  
 Decl. 10° 39' 3"  
 Apparent magnitude: 2.72  
 Absolute magnitude: -3.03  
 Constellation: Aquila

145. Deneb Algedi  
 Section 8  
 RA 21h 48' 3.6"  
 Decl. -16° 2' 3"  
 Apparent magnitude: 2.85  
 Absolute magnitude: 2.49  
 Constellation: Capricornus

147.  $\delta$  Cygni  
 Section 8  
 RA 19h 45' 33.2"  
 Decl. 45° 10' 3"  
 Apparent magnitude: 2.86  
 Absolute magnitude: -0.74  
 Constellation: Cygnus

150.  $\alpha$  Tucanæ  
 Section 8  
 RA 22h 19' 45.2"  
 Decl. -60° 10' 0"  
 Apparent magnitude: 2.87  
 Absolute magnitude: -1.05  
 Constellation: Tucana

157. Albireo  
 Section 8  
 RA 19h 31' 28.1"  
 Decl. 27° 59' 5"  
 Apparent magnitude: 2.9  
 Absolute magnitude: -2.31  
 Constellation: Cygnus

158. Sadalsuud  
 Section 8  
 RA 21h 32' 31.9"  
 Decl. -5° 29' 2"  
 Apparent magnitude: 2.9  
 Absolute magnitude: -3.47  
 Constellation: Aquarius

164. Sadalmelik  
 Section 8  
 RA 22h 6' 44"  
 Decl. 0° 13' 4"  
 Apparent magnitude: 2.95  
 Absolute magnitude: -3.88  
 Constellation: Aquarius

176.  $\gamma$  Gruis  
 Section 8  
 RA 21h 55' 2.6"  
 Decl. -37° 16' 37"  
 Apparent magnitude: 3  
 Absolute magnitude: -0.97  
 Constellation: Grus

184. Dabih  
 Section 8  
 RA 20h 22' 2.9"  
 Decl. -14° 43' 1"  
 Apparent magnitude: 3.05  
 Absolute magnitude: -2.07  
 Constellation: Capricornus

192. Persian  
 Section 8  
 RA 20h 38' 51.6"  
 Decl. -47° 13' 32"  
 Apparent magnitude: 3.11  
 Absolute magnitude: 0.65  
 Constellation: Indus

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Version 3, 29 June 2007

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