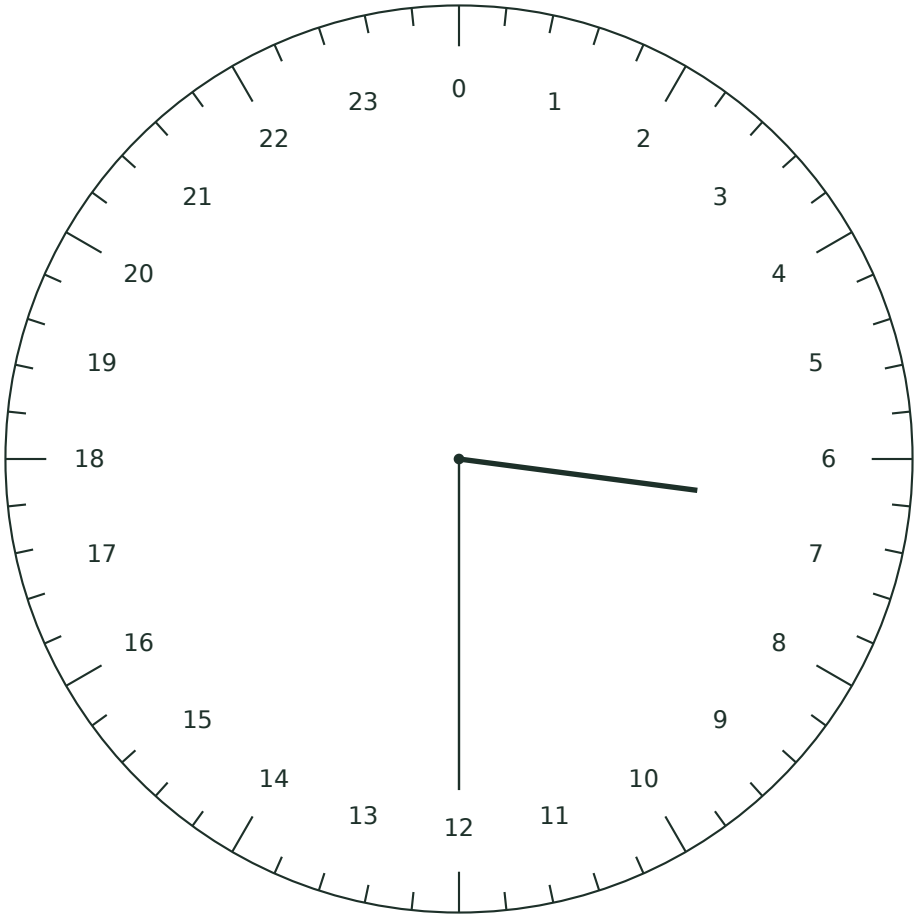
Draw a 24-Hour Clock Face: Numerals, Ticks, and Hands

WORKED REFERENCE

A circle has radius 60 mm. Place numerals 0 and 6, then compute the hand angles for 06:30 and state where each hand points.

Inner numerals: 24 positions, 15 degrees per hour. Outer minute ring: 60 ticks, 6 degrees each; every fifth tick is longer. Hour hand: thick; minute hand: thin.



06:30 / hour 97.5 degrees / minute 180 degrees

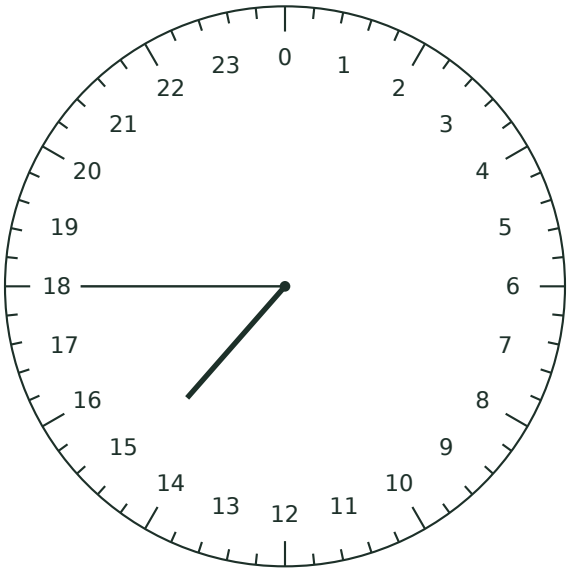
Confirm that numerals 0 and 6 are 6 hours apart and make a quarter-turn: 15 × 6 = 90 degrees. Recompute 6 × 30 = 180 and 15 × 6 + 0.25 × 30 = 97.5. Check that 97.5 degrees lies between the 6 position (90 degrees) and the 7 position (105 degrees).

Draw a 24-Hour Clock Face: Numerals, Ticks, and Hands

TWO SAMPLE TIMES

Compare these two exact hand placements. The 24-hour numeral ring and 60-minute tick ring are separate scales.

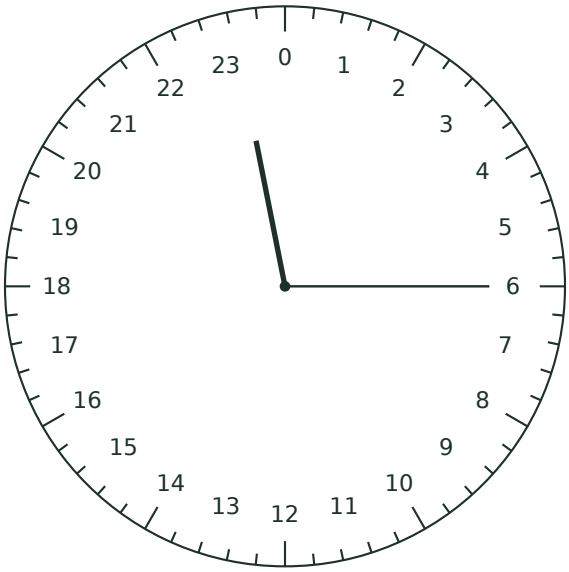
14:45



Hour: 221.25 degrees

Minute: 270 degrees

23:15



Hour: 348.75 degrees

Minute: 90 degrees

Hour hand: thick. Minute hand: thin. Clockwise angles from top.