

Mini-Mental State Examination (MMSE)^{1,2*}

Make the patient comfortable and establish rapport. Ask questions in the order listed. *Total possible score is 30.*

Maximum
Score Score

ORIENTATION

- 5 () 1. "What is the (year) (season) (date) (day) (month)?"
5 () 2. "Where are we?" (state) (county) (town or city) (hospital) (floor).

REGISTRATION

- 3 () Ask the patient if you may test his/her memory. Then say the names of 3 unrelated objects, clearly and slowly, about one second for each (eg, "apple," "table," "penny"). After you have said all 3, ask him/her to repeat them. This first repetition determines the score (0-3), but keep saying them until he/she can repeat all 3, up to 6 trials.

ATTENTION AND CALCULATION

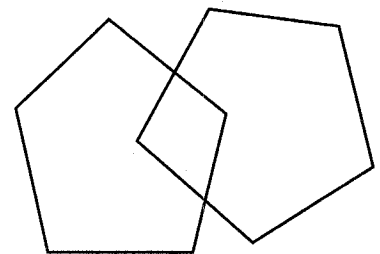
- 5 () Ask the patient to begin with 100 and count backwards by 7. Stop after 5 subtractions (93, 86, 79, 72, 65). Score the total number of correct answers. If the patient cannot or will not perform the serial 7s task, ask him/her to spell the word "WORLD" backwards. The score is the number of letters in the correct order (eg, DLROW = 5; DLRW = 4; DLORW, DLW = 3; OW = 2; DRLWO = 1).

RECALL

- 3 () Ask the patient to recall the 3 items repeated above (eg, "apple," "table," "penny").

LANGUAGE

- 2 () **Naming:** Show the patient a wristwatch and ask him/her what it is. Repeat for pencil.
1 () **Repetition:** Ask the patient to repeat the phrase "No ifs, ands, or buts" after you.
3 () **3-Stage Command:** Give the patient a piece of blank paper and ask him/her to "take a piece of paper in your right hand, fold it in half, put it on the floor." Score 1 point for each part correctly executed.
1 () **Reading:** On a blank piece of paper, print the sentence "CLOSE YOUR EYES" in letters large enough for the patient to see clearly. Ask him/her to read it and do what it says. Score 1 point only if he/she actually closes his/her eyes.
1 () **Writing:** Give the patient a blank piece of paper and ask him/her to write a sentence. Do not dictate a sentence; it is to be written spontaneously. It must contain a subject and verb and be sensible. Correct grammar and punctuation are not necessary.
1 () **Copying:** Ask the patient to copy the figure of intersecting pentagons exactly as it is. All 10 angles must be present and 2 must intersect to form a 4-sided figure to score 1 point. Tremor and rotation are ignored.



Maximum Total Score	Total Score	Suggested guideline for determining the severity of cognitive impairment:
30	()	Mild: MMSE ≥21 Moderate: MMSE 10-20 Severe: MMSE ≤9
Expected decline in MMSE scores in untreated mild to moderate Alzheimer's patient is 2 to 4 points per year. ^{3,4}		

* Adapted from Folstein et al¹ and Cockrell and Folstein.² © 1975, 1998 Mini Mental LLC. Used with permission.

References: 1. Folstein MF, Folstein SE, McHugh PR. "Mini-Mental State": a practical method for grading the cognitive state of patients for the clinician. *J Psychiatr Res.* 1975;12:189-198. 2. Cockrell JR, Folstein MF Mini-Mental State Examination (MMSE). *Psychopharm Bull.* 1988;24:689-692. 3. Becker JT, Huff FJ, Nebes RD, Holland A, Boller F. Neuropsychological function in Alzheimer's disease: pattern of impairment and rates of progression. *Arch Neurol.* 1988;45:263-268. 4. Mortimer JA, Ebbitt B, Jun S-P, Finch MD. Predictors of cognitive and functional progression in patients with probable Alzheimer's disease. *Neurology.* 1992;42:1689-1696.