Hit Center Target in Just Six Shots!

Get on Center Target in just six shots! The first three to establishes a base grouping. Then get on center with three corrected shots! (Optionally, shoot three more for confirmation!)

The advantage of using *Minute-of-Angle* for correction is it creates a common measurement, regardless of the distance to the target, and also corresponds to typical scope adjustments.

MOA Correction Target

The advantage of this target is it lets you measure the distance of bullet impact error without the need of ruler. Our target displays a cross-grid with quarter-inch to one-inch divisions so you can easily determine the impact distance off center. (You can also use this target's demarcations to easily measure pistol groupings.)

The target allows you to record your sight-in distance, wind direction, which gun you used, the rifle caliber, ammo manufacturer, bullet weight and configuration. You can also use our "**Sight-In Log**" in our **FIREARM FUNDAMENTALS** book (Appendix B) to record this information *plus* your corrections.

Our book also includes references to adjust for temperature changes, shooting up or down slopes, determining cross-wind factors and other essential information. You can download the *Sight-In Log, MOA Correction* target and these instructions, *FREE*, as well as purchase our book (discounts available) at: www.firearmfundamentals.net

Tables

Using the provide tables (on the back), you can quickly and accurately adjust your sights for a corrected impact, regardless of the shooting distance. Our first table converts those distances to *Minute-of-Angle* values. Once you know the MOA, you can easy correct the impact error using the clicks of your scope's elevation and windage adjustment.

Scope Sight Adjustments

You will need to know the value of each "click" of your sight adjustment. Typically scopes will adjust 1/8 MOA or 1/4 MOA per click, while a few adjust at 1/2 MOA per click. Since different scopes use different values for each "click", our second table provides references to each of these values. Be sure to use the correct value. **Note**: Many scopes may use the abbreviation "*Min*," instead of MOA, or just use the fraction alone. These variations all refer to *Minute-of-Angle (MOA)*.

Three Easy Steps

Take three shots, at any measured table distance, trying to achieve a tight grouping

- 1) Using the cross-grids on the *MOA Correction* target, determine the distance between the point of impact and the center of the target (both laterally and vertically)
- **2**) Use the *Minute-of-Angle* Table to convert the impact error from inches to MOA.
- 3) Now use the second table, *Scope Clicks* per Minute-of-Angle, to determine how many "clicks" are needed to correct the MOA impact error.

Shoot another group to confirm your corrections or set further adjustments. Be sure to let your barrel cool between groups. A hot barrel can cause a bullet impact differently.

Examples

- A) Let's say you're sighting in at 25 yards. Your point of impact is 3½" to the right. Your scope adjusts 1/4 MOA per click. Using the **Minute-of-Angle** table at 25 yards, it shows your error is 14 MOA. Using the **Scope Clicks per MOA** and indexing 14 MOA with 1/4 MOA per click, suggests it is necessary to adjust 56 clicks to the left.
- B) You're sighting in at 100 yards, and your scope uses 1/8 MOA clicks. Your shots are impacting 4½" low. The **Minute-of-Angle** table shows your error is 4.5 MOA. Using the **Scope Click per MOA** table and indexing the 1/8 MOA scope click to a 4.5 MOA error, shows you need to move your point of impact up 36 clicks.
- C) You're sighting your scope at 200 yards. Your scope uses 1/8 MOA clicks. Your shots are impacting 2½" to the left. The **Minute-of-Angle** table show your error is 1.3 MOA. Using the **Scope Click per MOA** table and indexing the 1/8 MOA scope click to a 1.25 MOA error, shows you need to move your point of impact right 10 clicks.

First convert the Off-Center impact error from inches to MOA using the table below (*Note*: Given the same error, the MOA value will change, depending on the distance to the target)

Minute-of-Angle (MOA) Table (at a given distance)

Error	25 yds	50 yds	75 yds	100 yds	200 yds	300 yds	400 yds	500 yds	1000 yds
1/4"	1 MOA	.5 MOA	.4 MOA	.25 MOA	.1 MOA	.1 MOA	.1 MOA	.05 MOA	.03 MOA
1/2"	2 MOA	1.0 MOA	.8 MOA	.50 MOA	.3 MOA	.2 MOA	.1 MOA	.10 MOA	.05 MOA
3/4"	3 MOA	1.5 MOA	1.1 MOA	.75 MOA	.4 MOA	.3 MOA	.2 MOA	.15 MOA	.08 MOA
1"	4 MOA	2.0 MOA	1.5 MOA	1.0 MOA	.5 MOA	.3 MOA	.3 MOA	.30 MOA	.10 MOA
1 ¼"	5 MOA	2.5 MOA	1.9 MOA	1.3 MOA	.6 MOA	.4 MOA	.3 MOA	.33 MOA	.13 MOA
1 ½"	6 MOA	3.0 MOA	2.2 MOA	1.5 MOA	.8 MOA	.5 MOA	.3 MOA	.35 MOA	.15 MOA
1 ¾"	7 MOA	3.5 MOA	2.7 MOA	1.8 MOA	.9 MOA	.6 MOA	.4 MOA	.38 MOA	.18 MOA
2"	8 MOA	4.0 MOA	3.0 MOA	2.0 MOA	1.0 MOA	.7 MOA	.5 MOA	.40 MOA	.20 MOA
2 1/4"	9 MOA	4.5 MOA	3.4 MOA	2.3 MOA	1.2 MOA	.7 MOA	.5 MOA	.45 MOA	.23 MOA
2 ½"	10 MOA	5.0 MOA	3.8 MOA	2.5 MOA	1.3 MOA	.8 MOA	.6 MOA	.50 MOA	.25 MOA
2 ¾"	11 MOA	5.5 MOA	4.2 MOA	2.8 MOA	1.4 MOA	.9 MOA	.7 MOA	.55 MOA	.28 MOA
3"	12 MOA	6.0 MOA	4.5 MOA	3.0 MOA	1.5 MOA	1.0 MOA	.8 MOA	.60 MOA	.30 MOA
3 ½"	14 MOA	7.0 MOA	5.3 MOA	3.5 MOA	1.6 MOA	1.2 MOA	.9 MOA	.70 MOA	.35 MOA
4"	16 MOA	8.0 MOA	6.0 MOA	4.0 MOA	2.0 MOA	1.3 MOA	1.0 MOA	.80 MOA	.40 MOA
4 1/2"	18 MOA	9.0 MOA	6.8 MOA	4.5 MOA	2.3 MOA	1.5 MOA	1.1 MOA	.90 MOA	.45 MOA
5"	20 MOA	10.0 MOA	7.5 MOA	5.0 MOA	2.5 MOA	1.7 MOA	1.3 MOA	1.0 MOA	.50 MOA
5 ½"	22 MOA	11.0 MOA	8.3 MOA	5.5 MOA	2.8 MOA	1.9 MOA	1.4 MOA	1.1 MOA	.55 MOA
6"	24 MOA	12.0 MOA	9.0 MOA	6.0 MOA	3.0 MOA	2.0 MOA	1.5 MOA	1.2 MOA	.60 MOA
6 ½"	26 MOA	13.0 MOA	9.8 MOA	6.5 MOA	3.3 MOA	2.2 MOA	1.7 MOA	1.3 MOA	.65 MOA
7"	28 MOA	14.0 MOA	10.5 MOA	7.0 MOA	3.5 MOA	2.3 MOA	1.8 MOA	1.4 MOA	.70 MOA
7 ½"	30 MOA	15.0 MOA	11.3 MOA	7.5 MOA	3.8 MOA	2.5 MOA	1.9 MOA	1.5 MOA	.75 MOA
8"	32 MOA	16.0 MOA	12.0 MOA	8.0 MOA	4.0 MOA	2.6 MOA	2.0 MOA	1.6 MOA	.80 MOA

Now index the MOA value from above with your sight's click adjustment correction

Scope Clicks per MOA Correction Table

1/8 (.125) to 4 MOA Off Center Impact Click Adjustment

MOA Error >	.125	.25	.5	.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3	3.5	4
1/8 MOA Click	1	2	4	6	8	10	12	14	16	18	20	22	24	28	32
1/4 MOA Click	_	1	2	3	4	5	6	7	8	9	10	11	12	14	16
1/2 MOA Click	_	_	1	_	2	_	3	_	4	_	5	_	6	7	8

4.5 to 32 MOA Off Center Impact *Click* Adjustment

MOA Error >	4.5	5	5.5	6	6.5	7	7.5	8	10	12	14	16	20	28	32
1/8 MOA Click	36	40	44	48	52	56	60	64	80	96	112	128	160	224	256
1/4 MOA Click	18	20	22	24	26	28	30	32	40	48	56	64	80	112	128
1/2 MOA Click	9	10	11	12	13	14	15	16	20	24	28	32	40	56	64