

Appendix E — MOA



Minute of Angle (or Minute of Arc)

It will be necessary to know the value of each “click” of your sight adjustment. Most sights use either:

1/8 MOA per click	1/2 MOA per click
1/4 MOA per click	1 MOA per click

Use the adjacent tables, for scopes and aperture sights to determine correct adjustments at various given target distances.

- A) The number of clicks needed to move the impact one inch
- B) The amount of change, in inches, for each click;
- C) The area a red dot or reflex sight masks at a given distance
- D) Converts the physical distance off target center, in inches, to the MOA at a given yardage

E

Using Our *MOA Correction Sight-In Target*

You can use this table information in conjunction with “**FIREARM FUNDAMENTAL’S** Copyrighted *MOA Correction* sight-in target.

To use the *MOA Correction* sight-in target, set the target any distance from 25 yards to 1,000 yards from your shooting bench.

After a three or five round volley, measure the distance between the bullet impact and the center of the target.

The table will convert the distance off target center, in inches, to the relative MOA for that distance. The adjacent table will then convert the resulting MOA into the number of clicks needed, for your sight, to impact the target center.

(Also see “Appendix F — MOA Correction Target” on page 291)

Our *MOA Correction* sight-in target and complete instructions are available FREE from our web site:

www.FirearmFundamentals.net/More.html

The Number of Clicks Required to Move the Impact One Inch

# Clicks @	10 yds	25 yds	50 yds	100 yds	200 yds	300 yds	400 yds	500 yds	600 yds	700 yds	800 yds	900 yds	1,000 yds
1/8 MOA	80 clicks	32 clicks	16 clicks	8 clicks	4 clicks	2.7 clicks	2 clicks	1.6 clicks	1.3 clicks	1.1 clicks	1 clicks	1 clicks	.8 clicks
1/4 MOA	40 clicks	16 clicks	8 clicks	4 clicks	2 clicks	1.3 clicks	1 clicks	.8 clicks	.7 clicks	.6 clicks	.5 clicks	.4 clicks	.4 clicks
1/2 MOA	20 clicks	8 clicks	4 clicks	2 clicks	1 clicks	.7 clicks	.5 clicks	.4 clicks	.3 clicks	.3 clicks	.3 clicks	.2 clicks	.2 clicks
1 MOA	10 clicks	4 clicks	2 clicks	1 clicks	.5 clicks	.3 clicks	.3 clicks	.2 clicks	.2 clicks	.1 clicks	.1 clicks	.1 clicks	.1 clicks

The Amount of Change for Each Click, in Inches

One Click =	10 yds	25 yds	50 yds	100 yds	200 yds	300 yds	400 yds	500 yds	600 yds	700 yds	800 yds	900 yds	1,000 yds
1/8 MOA	.01 in	.03 in	.06 in	.125 in	.25 in	.375 in	.50 in	.625 in	.75 in	.875 in	1 in	1.125 in	1.25 in
1/4 MOA	.03 in	.06 in	.125 in	.25 in	.50 in	.75 in	1 in	1.25 in	1.50 in	1.75 in	2 in	2.25 in	2.50 in
1/2 MOA	.05 in	.125 in	.25 in	.50 in	1 in	1.50 in	2 in	2.50 in	3 in	3.50 in	4 in	4.50 in	5 in
1 MOA	.10 in	.25 in	.50 in	1 in	2 in	3 in	4 in	5 in	6 in	7 in	8 in	9 in	10 in

Reflex (Dot) Sight Target Coverage, in Inches

Dot Size	10 yds	25 yds	50 yds	100 yds	200 yds	300 yds	400 yds	500 yds	600 yds	700 yds	800 yds	900 yds	1,000 yds
2 MOA	.20 in	.50 in	1 in	2 in	4 in	6 in	8 in	10 in	12 in	14 in	16 in	18 in	20 in
3 MOA	.30 in	.75 in	1.50 in	3 in	6 in	9 in	12 in	15 in	18 in	21 in	24 in	27 in	30 in
4 MOA	.40 in	1 in	2 in	4 in	8 in	12 in	16 in	20 in	24 in	28 in	32 in	36 in	40 in
5 MOA	.50 in	1.25 in	2.50 in	5 in	10 in	15 in	20 in	25 in	30 in	35 in	40 in	45 in	50 in
6 MOA	.60 in	1.50 in	3 in	6 in	12 in	18 in	24 in	30 in	36 in	42 in	48 in	54 in	60 in
7 MOA	.70 in	1.75 in	3.50 in	7 in	14 in	21 in	28 in	35 in	42 in	49 in	56 in	63 in	70 in
8 MOA	.80 in	2 in	4 in	8 in	16 in	24 in	32 in	40 in	48 in	56 in	64 in	72 in	80 in

The Distance Off Center Impact, in MOA

Off Center	10 yds	25 yds	50 yds	100 yds	200 yds	300 yds	400 yds	500 yds	600 yds	700 yds	800 yds	900 yds	1,000 yds
1/8 Inch	1.25 MOA	.50 MOA	.25 MOA	.13 MOA	.06 MOA	.04 MOA	.03 MOA	.03 MOA	.04 MOA	.02 MOA	.02 MOA	.01 MOA	.01 MOA
1/4 Inch	2.50 MOA	1.00 MOA	.50 MOA	.25 MOA	.13 MOA	.08 MOA	.06 MOA	.05 MOA	.04 MOA	.04 MOA	.03 MOA	.03 MOA	.03 MOA
1/2 Inch	5.00 MOA	2.00 MOA	1.00 MOA	.50 MOA	.25 MOA	.17 MOA	.13 MOA	.10 MOA	.08 MOA	.07 MOA	.06 MOA	.06 MOA	.06 MOA
3/4 Inch	7.50 MOA	3.00 MOA	1.50 MOA	.75 MOA	.38 MOA	.25 MOA	.19 MOA	.15 MOA	.13 MOA	.11 MOA	.09 MOA	.08 MOA	.08 MOA
1 Inch	10.00 MOA	4.00 MOA	2.00 MOA	1.00 MOA	.50 MOA	.33 MOA	.25 MOA	.20 MOA	.17 MOA	.14 MOA	.13 MOA	.11 MOA	.10 MOA
2 Inch	20.00 MOA	8.00 MOA	4.00 MOA	2.00 MOA	1.00 MOA	.67 MOA	.50 MOA	.40 MOA	.33 MOA	.29 MOA	.25 MOA	.22 MOA	.20 MOA
3 Inch	30.00 MOA	12.00 MOA	6.00 MOA	3.00 MOA	1.50 MOA	1.00 MOA	.75 MOA	.60 MOA	.50 MOA	.43 MOA	.38 MOA	.33 MOA	.30 MOA
4 Inch	40.00 MOA	16.00 MOA	8.00 MOA	4.00 MOA	2.00 MOA	1.33 MOA	1.00 MOA	.80 MOA	.67 MOA	.57 MOA	.50 MOA	.44 MOA	.40 MOA
5 Inch	50.00 MOA	20.00 MOA	10.00 MOA	5.00 MOA	2.50 MOA	1.67 MOA	1.25 MOA	1.00 MOA	.83 MOA	.71 MOA	.63 MOA	.56 MOA	.50 MOA
6 Inch	60.00 MOA	24.00 MOA	12.00 MOA	6.00 MOA	3.00 MOA	2.00 MOA	1.50 MOA	1.20 MOA	1.00 MOA	.86 MOA	.75 MOA	.67 MOA	.60 MOA