



# Google Ads Formulas

No.	Name	Usually Referred As	Formula
1.	Click-Through Rate	CTR	Clicks / Impressions X 100
2.	Cost Per Mille	CPM	Cost / 1000 impressions
3.	Cost Per Acquisition	CPA	Total ad cost / Total conversions
4.	Conversion Rate	CVR	Conversion / Clicks
5.	Cost Per Click	CPC	(Ad rank below competitor/ Your quality score) + 0.01
6.	Total Cost	Cost	Clicks X CPC
7.	Quality Score	QS	1) Expected CTR 2) Ad Relevance 3) Landing Page Experience  QS is graded from 1-10.
8.	Ad Rank	Ad Rank	1) Max CPC 2) Auction Time QS 3) Ad Rank Threshold 4) Competitiveness of Auction 5) Context of Search Query 6) Ad extensions
9.	Return On Ad Spend (or Conv. Value/Cost in Google Ads)	ROAS	Conversion value / Cost of ads
10.	Return On Investment	ROI	Conversion value – (Cost of ads + Cost of Goods Sold)
11.	Average Cost Per Click	Avg. CPC	Total cost of clicks / Total clicks
12.	Impression Share	IS	Impressions / Total eligible impressions



No.	Name	Usually Referred As	Formula
13.	Absolute Top Impression Share	ATIS	Absolute top impressions / Total Eligible top impressions (shopping ads only)
14.	Interaction Rate	Interaction Rate	Total interactions / Total impressions
15.	Average Cost Per Mille	Avg. CPM	Average Cost / 1000 Impressions
16.	Average Cost Per Engagement	Avg. CPE	Average Cost / Engagement
17.	Average Cost Per View	Avg. CPV	Total cost / Total video views
18.	View Rate	VR	Total video views / Impressions
19.	Search Absolute Top Impression Rate	Search ATIS	Absolute top impressions / Total impressions
20.	Search Top Impression Rate	Search TIS	Top impressions / Total impressions
21.	Conversion Value Per Click	Conv. Value / Click	Total conversion value / Total ad interactions
22.	Value Per Conversion	Value / Conv	Conversion value / Number of conversions
23.	Average Cart Size (beta)	Avg. Cart Size	Total products sold / Total number of transactions
24.	Average Order Value (beta)	Avg. Order Value	Revenue / Orders
25.	Gross Profit	GP	Revenue – Cost of Goods Sold
26.	Engagement Rate	Engagement Rate	Total ad engagement / Total impressions



No.	Name	Usually Referred As	Formula
27.	Bounce Rate (Universal Analytics)	BR	% of single page visits  Google Ads sessions only.
28.	Pages Per Session (Google Analytics)	Pages/Sess	Total pages viewed / Total sessions  Google Ads sessions only.
29.	Average Session Duration (Google Analytics)	Avg. Sess Duration	Total duration of all sessions / Total sessions  Google Ads sessions only.
30.	% Of New Sessions (Google Analytics)	% Of New Sessions	First time sessions / Total sessions  Google Ads sessions only.
31.	Click Share	Click Share	Clicks you received on Search Network / Maximum clicks you could have received  For example, if you received 60 clicks, and your click share is 60%, then it's estimated that there were another 40 clicks that you could have received.
32.	Phone Through Rate	PTR	Total phone calls received / Number of times phone number was shown
33.	Break Even Return On Ad Spend	Break Even ROAS	1 / Profit Margin  If you make \$200 net profit on a \$1000 sale, your PM is 20%. $1 / 0.20 = 5$ . (500% Break Even ROAS)



No.	Name	Usually Referred As	Formula
34.	Close Rate	Close Rate	% of closes / conversions
35.	True Cost Per Conversion	True CPA	<p>Google Ads CPA / % Close Rate</p> <p>If your Google Ads CPA is \$20 and Close Rate is 30%, then your True CPA is <math>20/0.30 = 66.67</math>.</p>
36.	Invalid Click Rate	ICR	% of invalid clicks / total clicks received
37.	Invalid Interaction Rate	IIR	% of invalid interactions / total interactions received
38.	Average Cost	Avg. Cost	<p>Total cost / Total interactions</p> <p>If there are two interactions with your ad, one costing \$0.30 and one costing \$0.40, your average cost for those interactions is \$0.35.</p>
39.	Optimization Score	Optimization Score	Estimate of how well your Google Ads is set to perform. Score rated between 1-100.
*40.	Custom Column	Custom Column	<p>It allows you to build your own metrics based on existing metrics. If you wanted to see Mobile Share of Clicks, you could build out the formula like:</p> <p>Clicks: Mobile Phones / Clicks</p>



Know these formulas like the back of your hand. It will help you tremendously when optimizing ad campaigns as you will know what you need to look out for. I will be updating this list when new metrics present themselves within Google Ads. Thanks for reading.

This list was compiled by Cyrus, [www.samuraippc.com](http://www.samuraippc.com)  
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