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| --- |
| **Changelog** **4/23/2011:**   * Added 4.1.0 Resilience DR Mechanics   **4/20/2011:**   * Updated Resilience for 4.0.6 and 4.1.0 * Removed extra haste note   **10/24/2010:**   * Added a section on Mana Regeneration in 4.0.1   **10/22/2010:**   * Completed Dodge to Agi table for all classes levels 80 and 85. (Thanks to Hinalover and Althor)   **10/3/2010:**   * Added the updated Avoidance DR Caps table for all classes (4.0.3.13117) * Added Dodge to Agi table for some classes, help needed to complete the table! [(Check out this post for instructions)](http://elitistjerks.com/f15/t29453-combat_ratings_level_85_cataclysm/p22/#post1759649) * Added Magic Resistance Mechanics for Cataclysm   **10/2/2010 4.0.3.13117:**   * Added Base Dodge table for 4.0.1.13117 * Warriors, Paladins, and Death Knights all get 25% of Strength as Parry Rating as base line.   **9/21/2010 4.0.1.12984:**   * New: Armor reduction formula for levels 81 and up   **9/19/2010 4.0.1.12942:**   * Removed: Defense Rating, Armor Penetration Rating * Resilience now only has one single effect: Reduces all damage taken PVP * Changed: Block, Physical Hit, Expertise * New: Mastery * Base Crit, Agi/Crit and Int/SpellCrit tables updated * Mana regen/spirit from level 80 to 85 remains the same as level 80 * The diminishing returns mechanism for avoidance still works the same(caps appears to have been changed, will do more tests)   **Cataclysm Combat Ratings and Stats**   | [Rating](http://elitistjerks.com/) | [Level 60](http://elitistjerks.com/) | [Level 70](http://elitistjerks.com/) | [Level 80](http://elitistjerks.com/) | [Level 81](http://elitistjerks.com/) | [Level 82](http://elitistjerks.com/) | [Level 83](http://elitistjerks.com/) | [Level 84](http://elitistjerks.com/) | [Level 85](http://elitistjerks.com/) | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Dodge | 13.8 | 21.76154 | 45.25019 | 59.4173 | 78.02486 | 102.50013 | 134.58759 | 176.7189 | | Parry | 13.8 | 21.76154 | 45.25019 | 59.4173 | 78.02486 | 102.50013 | 134.58759 | 176.7189 | | Block | 6.9 | 10.88077 | 22.62509 | 29.70865 | 39.01243 | 51.25006 | 67.29379 | 88.35944 | | Hit | 9.37931 | 14.79045 | 30.75475 | 40.38358 | 53.03039 | 69.66526 | 91.47383 | 120.1088 | | Spell Hit | 8 | 12.61539 | 26.23199 | 34.44481 | 45.2318 | 59.42037 | 78.02179 | 102.44574 | | Crit | 14 | 22.07692 | 45.90599 | 60.27842 | 79.15565 | 103.98564 | 136.53813 | 179.28004 | | Resilience(Player Damage Taken) (4.0.6) | 9.58333 | 15.11218 | 31.42374 | 39.22359 | 48.95947 | 61.11195 | 76.28086 | 95.21492 | | Resilience(Player Damage Taken) (4.1.0) | 7.96418 | 12.5589 | 26.11453 | 32.59655 | 40.68751 | 50.78676 | 63.3928 | 79.12785 | | Haste | 10 | 15.76923 | 32.78999 | 43.05602 | 56.53975 | 74.27545 | 97.52724 | 128.05716 | | Expertise | 2.34483 | 3.69761 | 7.68869 | 10.09589 | 13.2576 | 17.41631 | 22.86845 | 30.0272 | | Armor Penetration | 3.756096 | 5.92308 | 12.31624 | 16.172256 | 21.23688 | 27.898584 | 36.632184 | 48.09952 | | Mastery | 14 | 22.07692 | 45.90599 | 60.27842 | 79.15565 | 103.98564 | 136.53813 | 179.28004 |   The combat rating formula level 1 to 80 remains the same:  where   * RatingBase is the conversion at level 60   and   * Level 70 to 80: * Level 60 to 70: * Level 10 to 60: * Level 1 to 10:   Note: For dodge, parry, block, and resilience levels 1 to 34:   **4.1.0 Resilience DR Mechanics**  http://flex.cdn.elitistjerks.com/images/chestnut/misc/citation.gif   |  | | --- | | Originally Posted by **4.1 Patch Notes**  *Resilience scaling has been modified for linear returns, as opposed to increasing returns. Under the new formula, going from 30 resilience to 40 resilience gives players the same increase to survivability as going from 0 to 10. Resilience now scales in the same way armor and magic resistances do. A player with 32.5% damage reduction from resilience in 4.0.6 should see their damage reduction unchanged in 4.1. Those with less than 32.5% will gain slightly. Those with more will lose some damage reduction, increasingly so as their resilience climbs.* |   The DR formula for Resilience:    where  is the damage reduction after DR.  is the damage reduction before DR.  Note: The process of deriving this formula is documented here: [Combat Ratings at level 85 (Cataclysm)](http://elitistjerks.com/f15/t29453-combat_ratings_level_85_cataclysm/p24/#post1916319)  **Avoidance DR Mechanics in Cataclysm**  The DR formula for Dodge and Parry:     where  is the avoidance after DR.  is the avoidance before DR.  is a class dependent cap of the stat.  is also a class dependent constant.  What has changed:   1. Dodge and Parry caps(,) for Warriors, Paladins, and Death Knights are now the same. 2. With Defense Rating removed, there is no longer a way to increase chance to be missed. Therefore  is also removed.   Warriors, Paladins, and Death Knights now all get 25% Strength as Parry Rating as a base skill, with all decimals floored.  The updated table for 4.0.3.13117:   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Warrior | 0.9560 | 65.631440 | 0.01523660 | 65.631440 | 0.01523660 | | Paladin | 0.9560 | 65.631440 | 0.01523660 | 65.631440 | 0.01523660 | | Hunter | 0.9880 | 145.560408 | 0.006870 | 145.560408 | 0.006870 | | Rogue | 0.9880 | 145.560408 | 0.006870 | 145.560408 | 0.006870 | | Priest | 0.9830 | N/A | N/A | 150.375940 | 0.006650 | | Death Knight | 0.9560 | 65.631440 | 0.01523660 | 65.631440 | 0.01523660 | | Shaman | 0.9880 | 145.560408 | 0.006870 | 145.560408 | 0.006870 | | Mage | 0.9830 | N/A | N/A | 150.375940 | 0.006650 | | Warlock | 0.9830 | N/A | N/A | 150.375940 | 0.006650 | | Druid | 0.9720 | N/A | N/A | 116.890707 | 0.008555 |   **Base Dodge and Dodge/Agi table for 4.0**   |  | [Base Agi](http://elitistjerks.com/) | [Lv80 Dodge/Agi](http://elitistjerks.com/) | [Lv80 Agi/1%Dodge](http://elitistjerks.com/) | [Lv85 Dodge/Agi](http://elitistjerks.com/) | [Lv85 Agi/1%Dodge](http://elitistjerks.com/) | | --- | --- | --- | --- | --- | --- | | Warrior | 3.7580 | 0.01359620 | 73.54996004 | 0.002321840 | 430.69289874 | | Paladin | 3.6520 | 0.01923890 | 51.97802369 | 0.003283990 | 304.50762639 | | Hunter | -5.450 | 0.01332660 | 75.03789414 | 0.002272730 | 439.99947200 | | Rogue | -0.590 | 0.02405370 | 41.57364309 | 0.004106500 | 243.51637648 | | Priest | 3.1830 | 0.01923660 | 51.98423838 | 0.003289470 | 304.00034048 | | Death Knight | 3.6640 | 0.01359620 | 73.54996249 | 0.002321840 | 430.69289874 | | Shaman | 1.6750 | 0.01923660 | 51.98423594 | 0.003289470 | 304.00034048 | | Mage | 3.4575 | 0.01952530 | 51.21560232 | 0.003331530 | 300.16238785 | | Warlock | 2.0350 | 0.01923660 | 51.98423838 | 0.003285640 | 304.35470715 | | Druid | 4.9510 | 0.02404580 | 41.58730423 | 0.004105380 | 243.58281085 |   **Thanks to:**   * Hinalover: Level 80 data from different races for Mage, Priest, and Death Knight. ([source](http://elitistjerks.com/f15/t29453-combat_ratings_level_85_cataclysm/p23/#post1760916)) * Althor: Level 85 data from different races for Shaman, Hunter, Rogue, and Warlock. ([source](http://elitistjerks.com/f15/t29453-combat_ratings_level_85_cataclysm/p23/#post1778666))   **Armor Reduction Formula for level 81 and up** The armor reduction formula has also been changed for levels 81 and up.   * Level 81 and up: * Level 60 to 80: * Level 1 to 59:   For tanks, you will want to know what's the armor cap when facing level 88 bosses, here's a quick table:   | [Armor Reduction for level 88 attacker](http://elitistjerks.com/) | [Armor needed](http://elitistjerks.com/) | | --- | --- | | 50% | 32572.5 | | 55% | 39810.8 | | 60% | 48858.7 | | 65% | 60491.7 | | 70% | 76002.5 | | 75% | 97717.5 |   **Complete Magic Resistance Mechanics for Catalysm** I stumbled upon something else when checking avoidance dr caps, and I took a detour of figuring out the resistance formula for all levels up to level 88.  Thanks to Shamgarr's great post on the "[Resistance Mechanics in WotLK](http://elitistjerks.com/f15/t44675-resistance_mechanics_wotlk/)", we have two good formulas that accurately describe: 1. The average damage reduction(), given the resistance value() and a level dependent constant():    2. The probability of each partial resist(), given the average damage reduction:    But there was one last piece of the puzzle that was left unsolved, the formula for the level dependent resistance constant() which I shell show in this post.  First, I have verified that the average damage reduction formula in Cataclysm (4.0.3.13117) hasn't changed and that the level 80 constant is indeed 400. Up until now, the level 83 constant(for wotlk bosses) has not been accurately identified, it was narrowed down to somewhere between 506 and 514 and assumed to be 510. My findings show that the constant for level 83 is exactly 506.5.   In 4.0.1, Blizzard added a new API that takes a level and a resistance value and returns the average damage reduction percentage. The resistance constant is actually the given resistance value, where you get a average damage reduction of 50%. So I quickly whipped up some addon code that gives me the 50% resistance value from level 1 to 100, and it gave me this:  http://flex.cdn.elitistjerks.com/images/chestnut/misc/code_html.gif  50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,50,52.5,55,57.5,60,62.5,65,67.5,70,72.5,75,77.5,80,82.5,85,87.5,90,92.5,95,97.5,100,102.5,105,107.5,110,112.5,115,117.5,120,122.5,125,127.5,130,132.5,135,137.5,140,142.5,145,147.5,150,143.5,139,136.5,136,137.5,141,146.5,154,163.5,175,188.5,204,221.5,241,262.5,286,311.5,339,368.5,400,433.5,469,506.5,546,587.5,631,676.5,724,773.5,825,878.5,934,991.5,1051,1112.5,1176,1241.5,1309,1378.5,1450  From these numbers we can derive the resistance constant formula to be: Level 1 to 20:  Level 21 to 60:  Level 61 to 100:   Using this formula, we can calculate the resistance constant at level 83 to be 150+(83-60)\*(83-67.5)=506.5   |  |  | | --- | --- | | http://elitistjerks.com/images/statusicon/wol_error.gif | This image has been resized. Click here to view the original image sized 600x400. |   And a quick reference table:   |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Resistance Values (Rounded to the first decimal) | | | | | | | | | | | | | Average Damage Reduction \ Levels | 60 | 70 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | | 5% | 7.9 | 9.2 | 21.1 | 22.8 | 24.7 | 26.7 | 28.7 | 30.9 | 33.2 | 35.6 | 38.1 | | 10% | 16.7 | 19.4 | 44.4 | 48.2 | 52.1 | 56.3 | 60.7 | 65.3 | 70.1 | 75.2 | 80.4 | | 15% | 26.5 | 30.9 | 70.6 | 76.5 | 82.8 | 89.4 | 96.4 | 103.7 | 111.4 | 119.4 | 127.8 | | 20% | 37.5 | 43.8 | 100.0 | 108.4 | 117.3 | 126.6 | 136.5 | 146.9 | 157.8 | 169.1 | 181.0 | | 25% | 50.0 | 58.3 | 133.3 | 144.5 | 156.3 | 168.8 | 182.0 | 195.8 | 210.3 | 225.5 | 241.3 | | 30% | 64.3 | 75.0 | 171.4 | 185.8 | 201.0 | 217.1 | 234.0 | 251.8 | 270.4 | 289.9 | 310.3 | | 35% | 80.8 | 94.2 | 215.4 | 233.4 | 252.5 | 272.7 | 294.0 | 316.3 | 339.8 | 364.3 | 389.8 | | 40% | 100.0 | 116.7 | 266.7 | 289.0 | 312.7 | 337.7 | 364.0 | 391.7 | 420.7 | 451.0 | 482.7 | | 45% | 122.7 | 143.2 | 327.3 | 354.7 | 383.7 | 414.4 | 446.7 | 480.7 | 516.3 | 553.5 | 592.4 | | 50%(Resistance Constant) | 150.0 | 175.0 | 400.0 | 433.5 | 469.0 | 506.5 | 546.0 | 587.5 | 631.0 | 676.5 | 724.0 | | 55% | 183.3 | 213.9 | 488.9 | 529.8 | 573.2 | 619.1 | 667.3 | 718.1 | 771.2 | 826.8 | 884.9 | | 60% | 225.0 | 262.5 | 600.0 | 650.3 | 703.5 | 759.8 | 819.0 | 881.3 | 946.5 | 1014.8 | 1086.0 | | 65% | 278.6 | 325.0 | 742.9 | 805.1 | 871.0 | 940.6 | 1014.0 | 1091.1 | 1171.9 | 1256.4 | 1344.6 | | 70% | 350.0 | 408.3 | 933.3 | 1011.5 | 1094.3 | 1181.8 | 1274.0 | 1370.8 | 1472.3 | 1578.5 | 1689.3 | | 75% | 450.0 | 525.0 | 1200.0 | 1300.5 | 1407.0 | 1519.5 | 1638.0 | 1762.5 | 1893.0 | 2029.5 | 2172.0 |   Also using this API, we can varify that the damage reduction is capped at 75% like armor reduction.  **Base Crit Stats** This is what you will have if you have 0 Agility, 0 Intellect and 0 Crit Rating   | [Class](http://elitistjerks.com/) | [Base Physical Crit](http://elitistjerks.com/) | [Base Spell Crit](http://elitistjerks.com/) | | --- | --- | --- | | Warrior | 0 | 0 | | Paladin | 0.652 | 3.3355 | | Hunter | -1.532 | 0 | | Rogue | -0.295 | 0 | | Priest | 3.1765 | 1.2375 | | Death Knight | 0 | 0 | | Shaman | 2.922 | 2.201 | | Mage | 3.454 | 0.9075 | | Warlock | 2.622 | 1.7 | | Druid | 7.4755 | 1.8515 |   **Amount of agility needed for 1% physical crit**   | [Level](http://elitistjerks.com/) | [Warrior](http://elitistjerks.com/) | [Paladin](http://elitistjerks.com/) | [Hunter](http://elitistjerks.com/) | [Rogue](http://elitistjerks.com/) | [Priest](http://elitistjerks.com/) | [Death Knight](http://elitistjerks.com/) | [Shaman](http://elitistjerks.com/) | [Mage](http://elitistjerks.com/) | [Warlock](http://elitistjerks.com/) | [Druid](http://elitistjerks.com/) | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 85 | 243.6 | 203.08 | 324.85 | 324.72 | 203.46 | 243.7 | 324.88 | 199.87 | 197.08 | 324.85 | | 84 | 185.6 | 154.55 | 247.41 | 247.3 | 154.95 | 185.6 | 247.42 | 152.01 | 150.09 | 247.41 | | 83 | 141.4 | 117.76 | 188.42 | 188.34 | 118.01 | 141.35 | 188.43 | 115.78 | 114.31 | 188.42 | | 82 | 107.6 | 89.7 | 143.43 | 143.37 | 89.83 | 107.6 | 143.44 | 87.97 | 87.01 | 143.43 | | 81 | 82 | 68.31 | 109.22 | 109.18 | 68.41 | 81.94 | 109.23 | 67.27 | 66.26 | 109.22 | | 80 | 62.4 | 51.98 | 83.18 | 83.15 | 52.1 | 62.4 | 83.19 | 51.1 | 50.46 | 83.18 | | 79 | 58 | 48.3 | 77.31 | 77.32 | 48.26 | 58 | 77.32 | 47.87 | 47.1 | 77.31 | | 78 | 54 | 44.85 | 71.85 | 71.88 | 44.97 | 54 | 71.86 | 43.98 | 43.73 | 71.85 | | 77 | 50.2 | 41.86 | 66.78 | 66.83 | 41.68 | 50.2 | 66.78 | 41.4 | 40.79 | 66.78 | | 76 | 46.6 | 38.87 | 62.07 | 62.07 | 38.94 | 46.6 | 62.07 | 38.16 | 37.85 | 62.07 | | 75 | 43.2 | 36.11 | 57.68 | 57.7 | 36.19 | 43.2 | 57.69 | 35.58 | 34.9 | 57.68 | | 74 | 40.2 | 33.58 | 53.61 | 53.62 | 33.45 | 40.2 | 53.62 | 32.99 | 32.38 | 53.61 | | 73 | 37.4 | 31.05 | 49.83 | 49.83 | 31.26 | 37.4 | 49.83 | 30.4 | 30.28 | 49.83 | | 72 | 34.8 | 28.98 | 46.31 | 46.33 | 29.06 | 34.8 | 46.31 | 28.46 | 28.17 | 46.31 | | 71 | 32.2 | 26.91 | 43.04 | 43.03 | 26.87 | 32.2 | 43.04 | 26.52 | 26.07 | 43.04 | | 70 | 30 | 24.84 | 40 | 40 | 24.91 | 30 | 40.01 | 24.58 | 24.29 | 40 | | 69 | 29 | 24.38 | 39.35 | 39.05 | 24.28 | 29 | 39.18 | 24.58 | 23.94 | 39.41 | | 68 | 28 | 23.92 | 38.6 | 38.19 | 24.19 | 28 | 38.34 | 23.93 | 23.6 | 38.8 | | 67 | 27 | 23.46 | 37.85 | 37.3 | 24.09 | 27 | 37.48 | 23.93 | 23.26 | 37.77 | | 66 | 26 | 22.77 | 37.11 | 36.13 | 23.77 | 26 | 36.58 | 23.93 | 22.93 | 37.17 | | 65 | 25 | 22.31 | 36.56 | 34.95 | 23.41 | 25 | 35.63 | 23.29 | 22.6 | 36.52 | | 64 | 24 | 21.85 | 35.82 | 33.79 | 23.02 | 24 | 35.11 | 23.29 | 22.28 | 35.83 | | 63 | 23 | 21.16 | 35.18 | 32.64 | 22.59 | 23 | 34.07 | 23.29 | 21.96 | 35.09 | | 62 | 22 | 20.7 | 34.44 | 31.08 | 22.43 | 22 | 32.89 | 22.64 | 21.65 | 33.9 | | 61 | 21 | 20.24 | 33.7 | 29.91 | 22.48 | 21 | 32.23 | 22.64 | 21.33 | 33.46 | | 60 | 20 | 19.55 | 33.17 | 28.17 | 21.94 | 20 | 31.28 | 22.64 | 21.03 | 32.48 | | 59 | 19.6 | 19.09 | 32.54 | 27.49 | 21.94 | 19.6 | 30.32 | 22.64 | 20.72 | 30.9 | | 58 | 19.2 | 18.86 | 31.8 | 27 | 21.39 | 19.2 | 29.84 | 21.99 | 20.42 | 30.5 | | 57 | 18.8 | 18.4 | 31.17 | 26.42 | 21.39 | 18.8 | 29.84 | 21.99 | 20.13 | 30.1 | | 56 | 18.4 | 18.17 | 30.44 | 25.93 | 20.84 | 18.4 | 29.36 | 21.99 | 19.83 | 29.71 | | 55 | 18.2 | 17.94 | 29.92 | 25.35 | 20.84 | 18.2 | 28.87 | 21.35 | 19.55 | 29.31 | | 54 | 17.8 | 17.48 | 29.29 | 24.77 | 20.29 | 17.8 | 27.91 | 21.35 | 19.26 | 28.52 | | 53 | 17.4 | 17.25 | 28.57 | 24.28 | 20.29 | 17.4 | 27.43 | 21.35 | 18.98 | 28.52 | | 52 | 17 | 16.79 | 27.94 | 23.7 | 19.74 | 17 | 27.43 | 20.7 | 18.7 | 28.12 | | 51 | 16.8 | 16.56 | 27.32 | 23.22 | 19.74 | 16.8 | 26.95 | 20.7 | 18.43 | 27.73 | | 50 | 16.4 | 16.33 | 26.81 | 22.73 | 19.19 | 16.4 | 26.47 | 20.7 | 18.16 | 27.33 | | 49 | 16 | 15.87 | 26.19 | 22.05 | 19.19 | 16 | 25.51 | 20.05 | 17.89 | 25.75 | | 48 | 15.8 | 15.64 | 25.57 | 21.56 | 19.19 | 15.8 | 25.51 | 20.05 | 17.63 | 25.35 | | 47 | 15.4 | 15.18 | 24.85 | 21.08 | 18.65 | 15.4 | 25.02 | 20.05 | 17.37 | 24.96 | | 46 | 15 | 14.95 | 24.24 | 20.59 | 18.65 | 15 | 24.54 | 19.4 | 17.11 | 24.96 | | 45 | 14.8 | 14.72 | 23.73 | 20.11 | 18.1 | 14.8 | 24.06 | 19.4 | 16.86 | 24.56 | | 44 | 14.4 | 14.26 | 23.12 | 19.52 | 18.1 | 14.4 | 23.58 | 19.4 | 16.61 | 23.77 | | 43 | 14.2 | 14.03 | 22.51 | 18.94 | 18.1 | 14.2 | 23.1 | 18.76 | 16.36 | 23.37 | | 42 | 13.8 | 13.57 | 21.9 | 18.46 | 17.55 | 13.8 | 22.62 | 18.76 | 16.12 | 22.97 | | 41 | 13.6 | 13.57 | 21.29 | 17.97 | 17.55 | 13.6 | 22.62 | 18.76 | 15.88 | 22.97 | | 40 | 13.2 | 13.34 | 20.79 | 17.48 | 17 | 13.2 | 22.14 | 18.76 | 15.64 | 22.58 | | 39 | 12.8 | 12.88 | 20.28 | 16.9 | 17 | 12.8 | 21.17 | 18.11 | 15.41 | 20.99 | | 38 | 12.6 | 12.65 | 19.68 | 16.42 | 17 | 12.6 | 21.17 | 18.11 | 15.17 | 20.6 | | 37 | 12.2 | 12.19 | 19.08 | 15.93 | 16.45 | 12.2 | 20.69 | 18.11 | 14.95 | 20.6 | | 36 | 12 | 12.19 | 18.47 | 15.54 | 16.45 | 12 | 20.69 | 18.11 | 14.72 | 20.2 | | 35 | 11.8 | 11.96 | 17.98 | 15.06 | 16.45 | 11.8 | 20.21 | 17.46 | 14.5 | 19.81 | | 34 | 11.4 | 11.5 | 17.38 | 14.47 | 15.9 | 11.4 | 19.25 | 17.46 | 14.28 | 19.41 | | 33 | 11.2 | 11.27 | 16.88 | 13.99 | 15.9 | 11.2 | 19.25 | 17.46 | 14.06 | 19.01 | | 32 | 10.8 | 10.81 | 16.28 | 13.5 | 15.9 | 10.8 | 18.77 | 16.82 | 13.85 | 18.62 | | 31 | 10.6 | 10.81 | 15.69 | 13.02 | 15.36 | 10.6 | 18.29 | 16.82 | 13.64 | 18.62 | | 30 | 10.4 | 10.58 | 15.3 | 12.63 | 15.36 | 10.4 | 18.29 | 16.82 | 13.43 | 18.22 | | 29 | 10 | 10.12 | 14.7 | 12.04 | 15.36 | 10 | 17.32 | 16.82 | 13.22 | 16.64 | | 28 | 9.8 | 9.89 | 14.11 | 11.56 | 14.81 | 9.8 | 17.32 | 16.17 | 13.02 | 16.64 | | 27 | 9.4 | 9.66 | 13.62 | 11.07 | 14.81 | 9.4 | 16.84 | 16.17 | 12.82 | 16.24 | | 26 | 9.2 | 9.43 | 13.03 | 10.68 | 14.81 | 9.2 | 16.84 | 16.17 | 12.62 | 15.84 | | 25 | 9 | 9.2 | 12.54 | 10.2 | 14.26 | 9 | 16.36 | 16.17 | 12.42 | 15.84 | | 24 | 8.6 | 8.97 | 12.06 | 9.62 | 14.26 | 8.6 | 15.88 | 16.17 | 12.23 | 15.05 | | 23 | 8.4 | 8.74 | 11.47 | 9.23 | 14.26 | 8.4 | 15.4 | 15.52 | 12.04 | 15.05 | | 22 | 8 | 8.28 | 10.99 | 8.74 | 13.71 | 8 | 15.4 | 15.52 | 11.85 | 14.66 | | 21 | 7.8 | 8.28 | 10.4 | 8.35 | 13.71 | 7.8 | 14.92 | 15.52 | 11.66 | 14.26 | | 20 | 7.8 | 8.05 | 10.02 | 7.87 | 13.71 | 7.8 | 14.92 | 15.52 | 11.48 | 14.26 | | 19 | 7.4 | 7.59 | 9.44 | 7.38 | 13.71 | 7.4 | 13.96 | 14.88 | 11.3 | 12.68 | | 18 | 7.2 | 7.59 | 8.96 | 6.9 | 13.16 | 7.2 | 13.96 | 14.88 | 11.12 | 12.68 | | 17 | 6.8 | 7.13 | 8.37 | 6.41 | 13.16 | 6.8 | 13.47 | 14.88 | 10.94 | 12.28 | | 16 | 6.6 | 6.9 | 7.89 | 6.02 | 13.16 | 6.6 | 13.47 | 14.88 | 10.77 | 11.88 | | 15 | 6.4 | 6.9 | 7.52 | 5.63 | 12.61 | 6.4 | 12.99 | 14.88 | 10.6 | 11.88 | | 14 | 6.2 | 6.44 | 6.94 | 5.05 | 12.61 | 6.2 | 12.51 | 14.23 | 10.43 | 11.09 | | 13 | 6 | 6.44 | 6.46 | 4.66 | 12.61 | 6 | 12.03 | 14.23 | 10.09 | 11.09 | | 12 | 5.6 | 5.98 | 5.99 | 4.18 | 12.61 | 5.6 | 12.03 | 14.23 | 10.09 | 10.7 | | 11 | 5.4 | 5.75 | 5.41 | 3.79 | 12.06 | 5.4 | 11.55 | 14.23 | 10.09 | 10.7 | | 10 | 5.2 | 5.75 | 5.04 | 3.4 | 12.06 | 5.2 | 11.55 | 14.23 | 9.67 | 10.3 | | 9 | 5.2 | 5.52 | 4.87 | 3.21 | 12.06 | 5.2 | 11.07 | 13.58 | 9.67 | 9.51 | | 8 | 5 | 5.52 | 4.61 | 3.11 | 12.06 | 5 | 11.07 | 13.58 | 9.25 | 9.11 | | 7 | 4.8 | 5.29 | 4.44 | 3.01 | 11.52 | 4.8 | 10.59 | 13.58 | 9.25 | 9.11 | | 6 | 4.8 | 5.29 | 4.28 | 2.82 | 11.52 | 4.8 | 10.59 | 13.58 | 9.25 | 8.71 | | 5 | 4.6 | 5.06 | 4.12 | 2.72 | 11.52 | 4.6 | 10.59 | 13.58 | 8.83 | 8.71 | | 4 | 4.4 | 5.06 | 3.95 | 2.62 | 11.52 | 4.4 | 10.11 | 13.58 | 8.83 | 8.32 | | 3 | 4.2 | 4.83 | 3.69 | 2.43 | 10.97 | 4.2 | 10.11 | 12.94 | 8.83 | 8.32 | | 2 | 4.2 | 4.83 | 3.53 | 2.33 | 10.97 | 4.2 | 9.62 | 12.94 | 8.41 | 7.92 | | 1 | 4 | 4.6 | 3.52 | 2.23 | 10.97 | 4 | 9.62 | 12.94 | 8.41 | 7.92 |   **Amount of intellect needed for 1% spell crit**   | [Level](http://elitistjerks.com/) | [Warrior](http://elitistjerks.com/) | [Paladin](http://elitistjerks.com/) | [Hunter](http://elitistjerks.com/) | [Rogue](http://elitistjerks.com/) | [Priest](http://elitistjerks.com/) | [Death Knight](http://elitistjerks.com/) | [Shaman](http://elitistjerks.com/) | [Mage](http://elitistjerks.com/) | [Warlock](http://elitistjerks.com/) | [Druid](http://elitistjerks.com/) | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | 85 |  | 648.91 |  |  | 648.91 |  | 648.91 | 648.91 | 648.91 | 648.91 | | 84 |  | 494.2 |  |  | 494.2 |  | 494.2 | 494.2 | 494.2 | 494.2 | | 83 |  | 376.38 |  |  | 376.38 |  | 376.38 | 376.38 | 376.38 | 376.38 | | 82 |  | 286.51 |  |  | 286.51 |  | 286.51 | 286.51 | 286.51 | 286.51 | | 81 |  | 218.18 |  |  | 218.18 |  | 218.18 | 218.18 | 218.18 | 218.18 | | 80 |  | 166.16 |  |  | 166.16 |  | 166.16 | 166.16 | 166.16 | 166.16 | | 79 |  | 154.43 |  |  | 154.43 |  | 154.43 | 154.43 | 154.43 | 154.43 | | 78 |  | 143.43 |  |  | 143.43 |  | 143.43 | 143.43 | 143.43 | 143.43 | | 77 |  | 133.41 |  |  | 133.41 |  | 133.41 | 133.41 | 133.41 | 133.41 | | 76 |  | 123.89 |  |  | 123.89 |  | 123.89 | 123.89 | 123.89 | 123.89 | | 75 |  | 115.09 |  |  | 115.09 |  | 115.09 | 115.09 | 115.09 | 115.09 | | 74 |  | 107.03 |  |  | 107.03 |  | 107.03 | 107.03 | 107.03 | 107.03 | | 73 |  | 99.45 |  |  | 99.45 |  | 99.45 | 99.45 | 99.45 | 99.45 | | 72 |  | 92.61 |  |  | 92.61 |  | 92.61 | 92.61 | 92.61 | 92.61 | | 71 |  | 86.01 |  |  | 86.01 |  | 86.01 | 86.01 | 86.01 | 86.01 | | 70 |  | 79.9 |  |  | 80 |  | 80 | 79.9 | 80 | 80 | | 69 |  | 78.1 |  |  | 78.67 |  | 78.26 | 77.95 | 79.26 | 78.3 | | 68 |  | 76.3 |  |  | 77.08 |  | 76.49 | 76.24 | 78.53 | 76.58 | | 67 |  | 74.5 |  |  | 75.75 |  | 74.69 | 74.77 | 76.76 | 74.95 | | 66 |  | 73.3 |  |  | 74.42 |  | 72.53 | 72.57 | 74.34 | 72.82 | | 65 |  | 71.49 |  |  | 73.09 |  | 70.3 | 70.37 | 72.21 | 70.63 | | 64 |  | 69.09 |  |  | 71.76 |  | 68.15 | 70.13 | 70.01 | 68.63 | | 63 |  | 67.29 |  |  | 70.17 |  | 65.79 | 69.88 | 67.74 | 66.56 | | 62 |  | 64.88 |  |  | 69.1 |  | 63.08 | 69.88 | 64.92 | 63.86 | | 61 |  | 63.08 |  |  | 67.51 |  | 61.01 | 69.88 | 62.87 | 61.91 | | 60 |  | 54.07 |  |  | 66.45 |  | 57.16 | 69.88 | 60.61 | 60.98 | | 59 |  | 52.87 |  |  | 65.12 |  | 55.73 | 68.66 | 59.39 | 59.08 | | 58 |  | 52.27 |  |  | 63.52 |  | 55.02 | 67.2 | 58.18 | 57.81 | | 57 |  | 50.47 |  |  | 62.46 |  | 53.59 | 66.22 | 56.97 | 56.85 | | 56 |  | 49.86 |  |  | 61.13 |  | 52.52 | 64.75 | 55.76 | 55.9 | | 55 |  | 49.26 |  |  | 60.07 |  | 51.8 | 61.58 | 54.85 | 54.95 | | 54 |  | 48.06 |  |  | 58.47 |  | 50.38 | 60.35 | 53.64 | 53.68 | | 53 |  | 47.46 |  |  | 57.14 |  | 49.66 | 58.89 | 52.42 | 52.41 | | 52 |  | 46.26 |  |  | 56.08 |  | 48.23 | 57.91 | 51.21 | 51.77 | | 51 |  | 45.66 |  |  | 54.75 |  | 47.52 | 56.69 | 50 | 50.5 | | 50 |  | 45.06 |  |  | 53.69 |  | 46.45 | 55.71 | 49.09 | 49.55 | | 49 |  | 43.86 |  |  | 52.36 |  | 45.37 | 54.49 | 47.88 | 47.96 | | 48 |  | 43.26 |  |  | 51.03 |  | 44.3 | 53.27 | 46.67 | 46.69 | | 47 |  | 42.05 |  |  | 49.97 |  | 43.23 | 52.05 | 45.45 | 45.74 | | 46 |  | 40.85 |  |  | 48.64 |  | 42.52 | 50.82 | 44.55 | 44.78 | | 45 |  | 40.25 |  |  | 47.57 |  | 41.44 | 49.85 | 43.64 | 43.83 | | 44 |  | 39.05 |  |  | 46.25 |  | 40.37 | 48.63 | 42.42 | 42.88 | | 43 |  | 39.05 |  |  | 44.92 |  | 39.3 | 47.4 | 41.21 | 41.61 | | 42 |  | 37.85 |  |  | 43.85 |  | 38.23 | 46.43 | 40.3 | 40.97 | | 41 |  | 37.25 |  |  | 42.52 |  | 37.51 | 43.49 | 39.09 | 39.7 | | 40 |  | 36.65 |  |  | 41.46 |  | 36.8 | 42.52 | 38.18 | 39.07 | | 39 |  | 35.45 |  |  | 40.13 |  | 35.37 | 41.54 | 37.27 | 37.16 | | 38 |  | 34.85 |  |  | 39.07 |  | 34.66 | 40.32 | 36.06 | 36.21 | | 37 |  | 33.64 |  |  | 38.01 |  | 33.58 | 39.34 | 35.15 | 35.25 | | 36 |  | 33.04 |  |  | 36.68 |  | 32.87 | 38.12 | 33.94 | 34.3 | | 35 |  | 32.44 |  |  | 35.61 |  | 31.8 | 37.14 | 33.03 | 33.67 | | 34 |  | 31.24 |  |  | 34.55 |  | 30.73 | 35.92 | 32.12 | 32.4 | | 33 |  | 30.64 |  |  | 33.22 |  | 30.01 | 34.94 | 30.91 | 31.44 | | 32 |  | 30.04 |  |  | 32.16 |  | 28.94 | 33.96 | 30 | 30.81 | | 31 |  | 29.44 |  |  | 31.1 |  | 28.22 | 32.74 | 28.79 | 29.54 | | 30 |  | 28.84 |  |  | 30.03 |  | 27.15 | 32.01 | 28.18 | 28.9 | | 29 |  | 27.64 |  |  | 28.7 |  | 26.08 | 30.79 | 27.27 | 27.31 | | 28 |  | 27.04 |  |  | 27.64 |  | 25.37 | 29.57 | 26.06 | 26.04 | | 27 |  | 25.83 |  |  | 26.58 |  | 24.29 | 26.88 | 25.15 | 25.41 | | 26 |  | 25.83 |  |  | 25.51 |  | 23.58 | 25.66 | 23.94 | 24.46 | | 25 |  | 25.23 |  |  | 24.45 |  | 22.87 | 24.68 | 23.33 | 23.82 | | 24 |  | 24.03 |  |  | 23.39 |  | 21.79 | 23.7 | 22.42 | 22.87 | | 23 |  | 23.43 |  |  | 22.06 |  | 21.08 | 22.48 | 21.21 | 21.6 | | 22 |  | 22.83 |  |  | 21.26 |  | 20.01 | 21.75 | 20.3 | 20.96 | | 21 |  | 22.23 |  |  | 19.93 |  | 19.29 | 20.53 | 19.39 | 20.01 | | 20 |  | 21.63 |  |  | 19.14 |  | 18.58 | 19.79 | 18.48 | 19.37 | | 19 |  | 20.43 |  |  | 17.81 |  | 17.51 | 18.57 | 17.58 | 17.79 | | 18 |  | 20.43 |  |  | 16.74 |  | 16.79 | 17.59 | 16.67 | 16.83 | | 17 |  | 19.23 |  |  | 15.95 |  | 15.72 | 16.62 | 15.76 | 16.2 | | 16 |  | 18.62 |  |  | 14.62 |  | 15.01 | 15.64 | 14.55 | 15.25 | | 15 |  | 18.62 |  |  | 13.82 |  | 14.29 | 14.91 | 13.94 | 14.61 | | 14 |  | 17.42 |  |  | 12.76 |  | 13.22 | 13.68 | 13.03 | 13.34 | | 13 |  | 16.82 |  |  | 11.43 |  | 12.5 | 11.48 | 12.12 | 12.39 | | 12 |  | 16.22 |  |  | 10.63 |  | 11.43 | 10.75 | 11.21 | 11.75 | | 11 |  | 15.62 |  |  | 9.57 |  | 10.72 | 9.53 | 10.3 | 10.8 | | 10 |  | 15.02 |  |  | 8.77 |  | 10 | 8.8 | 9.39 | 10.16 | | 9 |  | 15.02 |  |  | 8.24 |  | 10 | 8.55 | 9.09 | 9.21 | | 8 |  | 14.42 |  |  | 7.97 |  | 9.65 | 8.06 | 8.79 | 8.89 | | 7 |  | 14.42 |  |  | 7.71 |  | 9.29 | 7.82 | 8.48 | 8.89 | | 6 |  | 13.82 |  |  | 7.44 |  | 8.93 | 7.57 | 8.18 | 8.58 | | 5 |  | 13.22 |  |  | 7.18 |  | 8.57 | 7.33 | 7.88 | 8.26 | | 4 |  | 13.22 |  |  | 6.64 |  | 8.22 | 7.09 | 7.58 | 7.94 | | 3 |  | 12.62 |  |  | 6.38 |  | 8.22 | 6.6 | 7.27 | 7.62 | | 2 |  | 12.62 |  |  | 6.11 |  | 7.86 | 6.35 | 6.97 | 7.31 | | 1 |  | 12.02 |  |  | 5.85 |  | 7.5 | 6.11 | 6.67 | 6.99 |   **Mana Regeneration** **4.0.1 Changes:**   * MP5 stat removed. * Five-Second-Rule removed. Its is now "Mana Regen while out of combat" and "Mana Regen while in combat", instead of "Mana Regen while not casting" and "Mana Regen while casting". * All mana classes get a baseline Combat Regen of 5% of your Base Mana(The amount of mana you have with 0 Intellect). * Spirit Regen formula is unchanged. * In the beta build 4.0.3.13202, the BASE\_REGEN coefficients for levels 81-85 remain the same as level 80 at 0.003345.   4.0.1.13202   |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Level | BASE\_REGEN | Level | BASE\_REGEN | Level | BASE\_REGEN | Level | BASE\_REGEN | Level | BASE\_REGEN | | 1 | 0.020979 | 21 | 0.011840 | 41 | 0.008235 | 61 | 0.006421 | 81 | 0.003345 | | 2 | 0.020515 | 22 | 0.011494 | 42 | 0.008113 | 62 | 0.006314 | 82 | 0.003345 | | 3 | 0.020079 | 23 | 0.011292 | 43 | 0.008018 | 63 | 0.006175 | 83 | 0.003345 | | 4 | 0.019516 | 24 | 0.010990 | 44 | 0.007906 | 64 | 0.006072 | 84 | 0.003345 | | 5 | 0.018997 | 25 | 0.010761 | 45 | 0.007798 | 65 | 0.005981 | 85 | 0.003345 | | 6 | 0.018646 | 26 | 0.010546 | 46 | 0.007713 | 66 | 0.005885 |  |  | | 7 | 0.018314 | 27 | 0.010321 | 47 | 0.007612 | 67 | 0.005791 |  |  | | 8 | 0.017997 | 28 | 0.010151 | 48 | 0.007524 | 68 | 0.005732 |  |  | | 9 | 0.017584 | 29 | 0.009949 | 49 | 0.007430 | 69 | 0.005668 |  |  | | 10 | 0.017197 | 30 | 0.009740 | 50 | 0.007340 | 70 | 0.005596 |  |  | | 11 | 0.016551 | 31 | 0.009597 | 51 | 0.007268 | 71 | 0.005316 |  |  | | 12 | 0.015729 | 32 | 0.009425 | 52 | 0.007184 | 72 | 0.005049 |  |  | | 13 | 0.015229 | 33 | 0.009278 | 53 | 0.007116 | 73 | 0.004796 |  |  | | 14 | 0.014580 | 34 | 0.009123 | 54 | 0.007029 | 74 | 0.004555 |  |  | | 15 | 0.014008 | 35 | 0.008974 | 55 | 0.006945 | 75 | 0.004327 |  |  | | 16 | 0.013650 | 36 | 0.008847 | 56 | 0.006884 | 76 | 0.004110 |  |  | | 17 | 0.013175 | 37 | 0.008698 | 57 | 0.006805 | 77 | 0.003903 |  |  | | 18 | 0.012832 | 38 | 0.008581 | 58 | 0.006747 | 78 | 0.003708 |  |  | | 19 | 0.012475 | 39 | 0.008457 | 59 | 0.006667 | 79 | 0.003522 |  |  | | 20 | 0.012073 | 40 | 0.008338 | 60 | 0.006600 | 80 | 0.003345 |  |  |   **WotLK stuff below for reference (updated to 3.3.5)**  Hello, I'm the author of RatingBuster and TankPoints, I've been able to derive most level 80 conversion rates and formulas in my beta testing, which should be useful for WotLK theorycrafting.  **Avoidance stats now have diminishing returns** This includes: 1. Dodge from Dodge Rating, Defense Rating, Agility. 2. Parry from Parry Rating, Defense Rating. 3. Chance to be missed from Defense Rating. ([Blue post](http://forums.worldofwarcraft.com/thread.html?topicId=10043278278&sid=2000))  The following is the result of hours of work gathering data from beta servers and then spending even more time running multiple regression analysis on the data.  1. DR for Dodge, Parry, Missed are calculated separately. 2. Base avoidances are not affected by DR. (e.g. Dodge from base Agility, 5% base Parry, 5% base Missed) 3. Death Knight's Parry Rating from base Strength is affected by DR. 4. Direct percentage gains from talents and spells are not affected by DR. (e.g. 5% Dodge from talents, 4% Parry to weapon, 25 Defense to weapon) 5.  and  values depend on class but does not change with level.  6. The DR formula:      is the diminished stat before converting to IEEE754.  is the stat before diminishing returns.  is the cap of the stat, and changes with class.  is a value that changes with class.   |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  | Lv80 Dodge/Agi(3.2.0) | Lv80 Agi/1%Dodge(3.2.0) | Base Dodge(3.2.0) | | Warrior | 0.9560 | 47.003525 | 0.021275 | 88.129021 | 0.011347 | 16 | 0.01180 | 84.74576271 | 3.66400 | | Paladin | 0.9560 | 47.003525 | 0.021275 | 88.129021 | 0.011347 | 16 | 0.01670 | 59.88023952 | 3.49430 | | Hunter | 0.9880 | 145.560408 | 0.006870 | 145.560408 | 0.006870 |  | 0.01160 | 86.20689655 | -4.08730 | | Rogue | 0.9880 | 145.560408 | 0.006870 | 145.560408 | 0.006870 |  | 0.02090 | 47.84688995 | 2.09570 | | Priest | 0.9830 | 0 | 0 | 150.375940 | 0.006650 |  | 0.01670 | 59.88023952 | 3.41780 | | Deathknight | 0.9560 | 47.003525 | 0.021275 | 88.129021 | 0.011347 | 16 | 0.01180 | 84.74576271 | 3.66400 | | Shaman | 0.9880 | 145.560408 | 0.006870 | 145.560408 | 0.006870 |  | 0.01670 | 59.88023952 | 2.10800 | | Mage | 0.9830 | 0 | 0 | 150.375940 | 0.006650 |  | 0.01700 | 58.82352941 | 3.65870 | | Warlock | 0.9830 | 0 | 0 | 150.375940 | 0.006650 |  | 0.01670 | 59.88023952 | 2.42110 | | Druid | 0.9720 | 0 | 0 | 116.890707 | 0.008555 |  | 0.02090 | 47.84688995 | 5.60970 |   If you're interested in all the work thats been done to arrive at these results, everything is well documented in the following posts in this thread: [DR effect of avoidance stat observed, research begins](http://elitistjerks.com/889364-post146.html) [Defense data from build 8970](http://elitistjerks.com/903432-post186.html) [Cross testing with Defense, Dodge Rating and Parry Rating](http://elitistjerks.com/903988-post197.html) [Parry from Parry Rating and Defense](http://elitistjerks.com/904009-post198.html) [The DR formula, and Parry calculations](http://elitistjerks.com/904541-post201.html) [Dodge calculations](http://elitistjerks.com/904843-post207.html) [Druid dodge cap calculation](http://elitistjerks.com/905651-post223.html) [Level does not affect the cap](http://elitistjerks.com/905848-post227.html) [GetAgiPerDodge() algorithm](http://elitistjerks.com/911826-post277.html) [The miss cap](http://elitistjerks.com/1053037-post335.html)  Lets do a quick example:  Level 60 warrior Defense without any gear: 300  Dodge% without any gear: 7.0076994895935 Parry% without any gear: 5 Dodge rating: 0 Parry rating: 0 Agility without any gear: 83  Put on some gear which gives +8 Defense +24 Dodge Rating +20 Parry Rating +21 Agility  How much Dodge% and Parry% do I have now?   Solution: For a level 60 Warrior 1 Defense = 0.04% Dodge + 0.04% Parry (the rest are not important for this problem) 12 Dodge Rating = 1% Dodge 15 Parry Rating = 1% Parry 1 Agility = 0.0427% Dodge         Add the base values and we have: Dodge = 10.2487108 Parry = 6.668054461   Answer: (These are the values taken in game) Dodge = 10.248710632324 Parry = 6.6680541038513  **Level 80 Combat Ratings and Stats**  The following data are verified correct for build 3.3.5 (9/19/2010).   |  |  |  |  | | --- | --- | --- | --- | | Rating | Level 60 | Level 70 | Level 80 | | Expertise(-1% Dodge/Parry) | 10 | 15.76923275 | 32.78998947 | | Defense Skill | 1.5 | 2.365385056 | 4.918498039 | | Resilience | 28.75 | 45.33654404 | 94.27122498 | | Dodge | 13.8 | 21.76153945 | 45.25018692 | | Parry | 13.8 | 21.76153945 | 45.25018692 | | Block | 5 | 7.884614944 | 16.39499474 | | Hit | 10 | 15.76923275 | 32.78998947 | | Spell Hit | 8 | 12.61538506 | 26.23199272 | | Critical Strike | 14 | 22.07692337 | 45.90598679 | | Spell Critical Strike | 14 | 22.07692337 | 45.90598679 | | Haste | 10 | 15.76923275 | 32.78998947 | | Spell Haste | 10 | 15.76923275 | 32.78998947 | | Armor Penetration | 4.268292514 | 6.730768897 | 13.99572719 |   3.2.0 changes - Dodge Rating: The amount of dodge rating required per percentage of dodge has been increased by 15%. - Parry Rating: The amount of parry rating required per percentage of parry has been reduced by 8%. - Resilience: The amount of resilience needed to reduce critical strike chance, critical strike damage and overall damage has been increased by 15%.  To derive the formula, I used haste data from level 70 to 100:   |  |  | | --- | --- | | Level | Rating | | 70 | 15.76923275 | | 71 | 16.96694183 | | 72 | 18.25562477 | | 73 | 19.6421833 | | 74 | 21.13405418 | | 75 | 22.73923683 | | 76 | 24.46633911 | | 77 | 26.32461739 | | 78 | 28.32403564 | | 79 | 30.47531509 | | 80 | 32.78998947 | | 81 | 35.2804718 | | 82 | 37.9601059 | | 83 | 40.84327316 | | 84 | 43.9454155 | | 85 | 47.28318024 | | 86 | 50.87445068 | | 87 | 54.73849106 | | 88 | 58.89601517 | | 89 | 63.36930847 | | 90 | 68.18236542 | | 91 | 73.36097717 | | 92 | 78.93292236 | | 93 | 84.92807007 | | 94 | 91.37856293 | | 95 | 98.31898499 | | 96 | 105.7865524 | | 97 | 113.8212967 | | 98 | 122.4663086 | | 99 | 131.7679138 | | 100 | 141.776001 |   With the help of curve fitting tools and decimals to fractions algorithm: Percentage = Rating / RatingBase / H 70 - 80: H = (82/52)\*(131/63)^((level-70)/10)  And for reference, the values for level 1 to 70: 60 - 70: H = 82/(262-3\*level)  10 - 60: H = (level-8)/52  1 - 10: H = 2/52   (RatingBase is the conversion at level 60)   |  |  |  | | --- | --- | --- | | Crit Per Agi | Level 70 | Level 80 | | Warrior | 0.0333 | 0.016 | | Paladin | 0.0403 | 0.0192 | | Hunter | 0.025 | 0.012 | | Rogue | 0.025 | 0.012 | | Priest | 0.0401 | 0.0192 | | Death Knight | 0.0333 | 0.016 | | Shaman | 0.025 | 0.012 | | Mage | 0.0407 | 0.0196 | | Warlock | 0.0412 | 0.0198 | | Druid | 0.025 | 0.012 |  |  |  |  | | --- | --- | --- | | Agi required for 1% Crit | Level 70 | Level 80 | | Warrior | 30.03003003 | 62.5 | | Paladin | 24.81389578 | 52.08333333 | | Hunter | 40 | 83.33333333 | | Rogue | 40 | 83.33333333 | | Priest | 24.93765586 | 52.08333333 | | Death Knight | 30.03003003 | 62.5 | | Shaman | 40 | 83.33333333 | | Mage | 24.57002457 | 51.02040816 | | Warlock | 24.27184466 | 50.50505051 | | Druid | 40 | 83.33333333 |   Full table for Crit Per Agi, precise formula yet to be found   |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Level | Warrior | Paladin | Hunter | Rogue | Priest | Death Knight | Shaman | Mage | Warlock | Druid | | 1 | 0.258700 | 0.216400 | 0.284000 | 0.447600 | 0.091200 | 0.258700 | 0.103900 | 0.077300 | 0.118900 | 0.126200 | | 2 | 0.226400 | 0.216400 | 0.283400 | 0.429000 | 0.091200 | 0.226400 | 0.103900 | 0.077300 | 0.118900 | 0.126200 | | 3 | 0.226400 | 0.216400 | 0.271100 | 0.411800 | 0.091200 | 0.226400 | 0.099000 | 0.077300 | 0.113200 | 0.120200 | | 4 | 0.226400 | 0.192400 | 0.253000 | 0.381300 | 0.086800 | 0.226400 | 0.099000 | 0.073600 | 0.113200 | 0.120200 | | 5 | 0.226400 | 0.192400 | 0.243000 | 0.367700 | 0.086800 | 0.226400 | 0.094500 | 0.073600 | 0.113200 | 0.114800 | | 6 | 0.201200 | 0.192400 | 0.233700 | 0.355000 | 0.086800 | 0.201200 | 0.094500 | 0.073600 | 0.108100 | 0.114800 | | 7 | 0.201200 | 0.192400 | 0.225100 | 0.332100 | 0.086800 | 0.201200 | 0.094500 | 0.073600 | 0.108100 | 0.109800 | | 8 | 0.201200 | 0.173200 | 0.217100 | 0.321700 | 0.082900 | 0.201200 | 0.090300 | 0.073600 | 0.108100 | 0.109800 | | 9 | 0.201200 | 0.173200 | 0.205100 | 0.312000 | 0.082900 | 0.201200 | 0.090300 | 0.073600 | 0.103400 | 0.105200 | | 10 | 0.201200 | 0.173200 | 0.198400 | 0.294100 | 0.082900 | 0.201200 | 0.086600 | 0.070300 | 0.103400 | 0.097100 | | 11 | 0.181100 | 0.173200 | 0.184800 | 0.264000 | 0.082900 | 0.181100 | 0.086600 | 0.070300 | 0.099100 | 0.093500 | | 12 | 0.181100 | 0.173200 | 0.167000 | 0.239400 | 0.079300 | 0.181100 | 0.083100 | 0.070300 | 0.099100 | 0.093500 | | 13 | 0.164600 | 0.157400 | 0.154700 | 0.214500 | 0.079300 | 0.164600 | 0.083100 | 0.070300 | 0.099100 | 0.090200 | | 14 | 0.164600 | 0.157400 | 0.144100 | 0.198000 | 0.079300 | 0.164600 | 0.079900 | 0.070300 | 0.095900 | 0.090200 | | 15 | 0.150900 | 0.144300 | 0.133000 | 0.177500 | 0.079300 | 0.150900 | 0.077000 | 0.067200 | 0.094400 | 0.084200 | | 16 | 0.150900 | 0.144300 | 0.126700 | 0.166000 | 0.076000 | 0.150900 | 0.074200 | 0.067200 | 0.092800 | 0.084200 | | 17 | 0.150900 | 0.144300 | 0.119400 | 0.156000 | 0.076000 | 0.150900 | 0.074200 | 0.067200 | 0.091400 | 0.081400 | | 18 | 0.139300 | 0.133200 | 0.111700 | 0.145000 | 0.076000 | 0.139300 | 0.071700 | 0.067200 | 0.089900 | 0.078900 | | 19 | 0.139300 | 0.133200 | 0.106000 | 0.135500 | 0.072900 | 0.139300 | 0.071700 | 0.067200 | 0.088500 | 0.078900 | | 20 | 0.129300 | 0.123700 | 0.099800 | 0.127100 | 0.072900 | 0.129300 | 0.067000 | 0.064400 | 0.087100 | 0.070100 | | 21 | 0.129300 | 0.123700 | 0.096200 | 0.119700 | 0.072900 | 0.129300 | 0.067000 | 0.064400 | 0.085700 | 0.070100 | | 22 | 0.129300 | 0.123700 | 0.091000 | 0.114400 | 0.072900 | 0.129300 | 0.064900 | 0.064400 | 0.084400 | 0.068200 | | 23 | 0.120700 | 0.115400 | 0.087200 | 0.108400 | 0.070100 | 0.120700 | 0.064900 | 0.064400 | 0.083100 | 0.066400 | | 24 | 0.113200 | 0.108200 | 0.082900 | 0.104000 | 0.070100 | 0.113200 | 0.063000 | 0.061800 | 0.081800 | 0.066400 | | 25 | 0.113200 | 0.108200 | 0.079700 | 0.098000 | 0.070100 | 0.113200 | 0.061100 | 0.061800 | 0.080500 | 0.063100 | | 26 | 0.106500 | 0.108200 | 0.076700 | 0.093600 | 0.067500 | 0.106500 | 0.059400 | 0.061800 | 0.079200 | 0.063100 | | 27 | 0.106500 | 0.101900 | 0.073400 | 0.090300 | 0.067500 | 0.106500 | 0.059400 | 0.061800 | 0.078000 | 0.061600 | | 28 | 0.100600 | 0.101900 | 0.070900 | 0.086500 | 0.067500 | 0.100600 | 0.057700 | 0.061800 | 0.076800 | 0.060100 | | 29 | 0.100600 | 0.096200 | 0.068000 | 0.083000 | 0.065100 | 0.100600 | 0.057700 | 0.059500 | 0.075600 | 0.060100 | | 30 | 0.095300 | 0.096200 | 0.065400 | 0.079200 | 0.065100 | 0.095300 | 0.054700 | 0.059500 | 0.074500 | 0.054900 | | 31 | 0.095300 | 0.091100 | 0.063700 | 0.076800 | 0.065100 | 0.095300 | 0.054700 | 0.059500 | 0.073300 | 0.053700 | | 32 | 0.090500 | 0.091100 | 0.061400 | 0.074100 | 0.062900 | 0.090500 | 0.053300 | 0.059500 | 0.072200 | 0.053700 | | 33 | 0.090500 | 0.086600 | 0.059200 | 0.071500 | 0.062900 | 0.090500 | 0.052000 | 0.057300 | 0.071100 | 0.052600 | | 34 | 0.086200 | 0.086600 | 0.057500 | 0.069100 | 0.062900 | 0.086200 | 0.052000 | 0.057300 | 0.070000 | 0.051500 | | 35 | 0.086200 | 0.082500 | 0.055600 | 0.066400 | 0.060800 | 0.086200 | 0.049500 | 0.057300 | 0.069000 | 0.050500 | | 36 | 0.082300 | 0.082500 | 0.054100 | 0.064300 | 0.060800 | 0.082300 | 0.048300 | 0.055200 | 0.067900 | 0.049500 | | 37 | 0.082300 | 0.082500 | 0.052400 | 0.062800 | 0.060800 | 0.082300 | 0.048300 | 0.055200 | 0.066900 | 0.048500 | | 38 | 0.078700 | 0.078700 | 0.050800 | 0.060900 | 0.058800 | 0.078700 | 0.047200 | 0.055200 | 0.065900 | 0.048500 | | 39 | 0.078700 | 0.078700 | 0.049300 | 0.059200 | 0.058800 | 0.078700 | 0.047200 | 0.055200 | 0.064900 | 0.047600 | | 40 | 0.075500 | 0.075300 | 0.048100 | 0.057200 | 0.058800 | 0.075500 | 0.045200 | 0.053300 | 0.063900 | 0.044300 | | 41 | 0.072400 | 0.075300 | 0.047000 | 0.055600 | 0.057000 | 0.072400 | 0.044200 | 0.053300 | 0.063000 | 0.043500 | | 42 | 0.072400 | 0.075300 | 0.045700 | 0.054200 | 0.057000 | 0.072400 | 0.044200 | 0.053300 | 0.062000 | 0.043500 | | 43 | 0.069600 | 0.072100 | 0.044400 | 0.052800 | 0.055300 | 0.069600 | 0.043300 | 0.053300 | 0.061100 | 0.042800 | | 44 | 0.069600 | 0.069300 | 0.043300 | 0.051200 | 0.055300 | 0.069600 | 0.042400 | 0.051500 | 0.060200 | 0.042100 | | 45 | 0.067100 | 0.069300 | 0.042100 | 0.049700 | 0.055300 | 0.067100 | 0.041600 | 0.051500 | 0.059300 | 0.040700 | | 46 | 0.067100 | 0.066600 | 0.041300 | 0.048600 | 0.053600 | 0.067100 | 0.040700 | 0.051500 | 0.058400 | 0.040100 | | 47 | 0.064700 | 0.066600 | 0.040200 | 0.047400 | 0.053600 | 0.064700 | 0.040000 | 0.049900 | 0.057600 | 0.040100 | | 48 | 0.062400 | 0.064100 | 0.039100 | 0.046400 | 0.052100 | 0.062400 | 0.039200 | 0.049900 | 0.056700 | 0.039400 | | 49 | 0.062400 | 0.064100 | 0.038200 | 0.045400 | 0.052100 | 0.062400 | 0.039200 | 0.049900 | 0.055900 | 0.038800 | | 50 | 0.060400 | 0.061800 | 0.037300 | 0.044000 | 0.052100 | 0.060400 | 0.037800 | 0.048300 | 0.055100 | 0.036600 | | 51 | 0.060400 | 0.059700 | 0.036600 | 0.043100 | 0.050700 | 0.060400 | 0.037100 | 0.048300 | 0.054300 | 0.036100 | | 52 | 0.058400 | 0.059700 | 0.035800 | 0.042200 | 0.050700 | 0.058400 | 0.036500 | 0.048300 | 0.053500 | 0.035600 | | 53 | 0.056600 | 0.057700 | 0.035000 | 0.041200 | 0.049300 | 0.056600 | 0.036500 | 0.046800 | 0.052700 | 0.035100 | | 54 | 0.056600 | 0.057700 | 0.034100 | 0.040400 | 0.049300 | 0.056600 | 0.035800 | 0.046800 | 0.051900 | 0.035100 | | 55 | 0.054900 | 0.055900 | 0.033400 | 0.039400 | 0.048000 | 0.054900 | 0.034600 | 0.046800 | 0.051200 | 0.034100 | | 56 | 0.054900 | 0.055900 | 0.032800 | 0.038600 | 0.048000 | 0.054900 | 0.034100 | 0.045500 | 0.050400 | 0.033700 | | 57 | 0.053300 | 0.054100 | 0.032100 | 0.037800 | 0.046800 | 0.053300 | 0.033500 | 0.045500 | 0.049700 | 0.033200 | | 58 | 0.051700 | 0.052500 | 0.031400 | 0.037000 | 0.046800 | 0.051700 | 0.033500 | 0.045500 | 0.049000 | 0.032800 | | 59 | 0.051700 | 0.052500 | 0.030700 | 0.036400 | 0.045600 | 0.051700 | 0.033000 | 0.044200 | 0.048300 | 0.032400 | | 60 | 0.050300 | 0.050900 | 0.030100 | 0.035500 | 0.045600 | 0.050300 | 0.032000 | 0.044200 | 0.047600 | 0.030800 | | 61 | 0.047700 | 0.049500 | 0.029700 | 0.033400 | 0.044500 | 0.047700 | 0.031000 | 0.044200 | 0.046900 | 0.029900 | | 62 | 0.045300 | 0.048100 | 0.029000 | 0.032200 | 0.044600 | 0.045300 | 0.030400 | 0.044200 | 0.046200 | 0.029500 | | 63 | 0.043100 | 0.046800 | 0.028400 | 0.030700 | 0.044300 | 0.043100 | 0.029400 | 0.042900 | 0.045500 | 0.028500 | | 64 | 0.042100 | 0.045600 | 0.027900 | 0.029600 | 0.043400 | 0.042100 | 0.028500 | 0.042900 | 0.044900 | 0.027900 | | 65 | 0.040200 | 0.044400 | 0.027300 | 0.028600 | 0.042700 | 0.040200 | 0.028100 | 0.042900 | 0.044200 | 0.027400 | | 66 | 0.038500 | 0.044400 | 0.027000 | 0.027600 | 0.042100 | 0.038500 | 0.027300 | 0.041800 | 0.043600 | 0.026900 | | 67 | 0.037000 | 0.042200 | 0.026400 | 0.026800 | 0.041500 | 0.037000 | 0.026700 | 0.041800 | 0.043000 | 0.026500 | | 68 | 0.035500 | 0.042200 | 0.025900 | 0.026200 | 0.041300 | 0.035500 | 0.026100 | 0.041800 | 0.042400 | 0.025800 | | 69 | 0.034200 | 0.041200 | 0.025400 | 0.025600 | 0.041200 | 0.034200 | 0.025500 | 0.040700 | 0.041800 | 0.025400 | | 70 | 0.033500 | 0.040300 | 0.025000 | 0.025000 | 0.040100 | 0.033500 | 0.025000 | 0.040700 | 0.041200 | 0.025000 | | 71 | 0.031200 | 0.036800 | 0.023200 | 0.023200 | 0.037200 | 0.031200 | 0.023200 | 0.037700 | 0.038400 | 0.023200 | | 72 | 0.028700 | 0.034600 | 0.021600 | 0.021600 | 0.034400 | 0.028700 | 0.021600 | 0.035100 | 0.035500 | 0.021600 | | 73 | 0.026600 | 0.032100 | 0.020100 | 0.020100 | 0.032000 | 0.026600 | 0.020100 | 0.032900 | 0.033000 | 0.020100 | | 74 | 0.024800 | 0.029900 | 0.018700 | 0.018700 | 0.029900 | 0.024800 | 0.018700 | 0.030300 | 0.030900 | 0.018700 | | 75 | 0.023200 | 0.027500 | 0.017300 | 0.017300 | 0.027600 | 0.023200 | 0.017300 | 0.028100 | 0.028700 | 0.017300 | | 76 | 0.021600 | 0.025800 | 0.016100 | 0.016100 | 0.025700 | 0.021600 | 0.016100 | 0.026200 | 0.026400 | 0.016100 | | 77 | 0.019900 | 0.024000 | 0.015000 | 0.015000 | 0.024000 | 0.019900 | 0.015000 | 0.024200 | 0.024500 | 0.015000 | | 78 | 0.018500 | 0.022200 | 0.013900 | 0.013900 | 0.022200 | 0.018500 | 0.013900 | 0.022700 | 0.022900 | 0.013900 | | 79 | 0.017200 | 0.020600 | 0.012900 | 0.012900 | 0.020700 | 0.017200 | 0.012900 | 0.020900 | 0.021200 | 0.012900 | | 80 | 0.016000 | 0.019200 | 0.012000 | 0.012000 | 0.019200 | 0.016000 | 0.012000 | 0.019600 | 0.019800 | 0.012000 |   Spell Crit Per Int is the same for all classes over level 70 (even for warlocks)   |  |  |  | | --- | --- | --- | | Level | Spell Crit Per Int | Int required for 1% Spell Crit | | 70 | 0.0125 | 80 | | 71 | 0.0116 | 86.2068944 | | 72 | 0.0108 | 92.59259244 | | 73 | 0.0101 | 99.00990313 | | 74 | 0.0093 | 107.526879 | | 75 | 0.0087 | 114.9425283 | | 76 | 0.0081 | 123.4567927 | | 77 | 0.0075 | 133.333327 | | 78 | 0.007 | 142.857139 | | 79 | 0.0065 | 153.8461534 | | 80 | 0.006 | 166.6666709 |   ManaRegen(SPI, INT, LEVEL) = (0.001+SPI\*BASE\_REGEN[LEVEL]\*(INT^0.5))\*5  3.3.5   |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | Level | BASE\_REGEN | Level | BASE\_REGEN | Level | BASE\_REGEN | Level | BASE\_REGEN | | 1 | 0.020979 | 21 | 0.011840 | 41 | 0.008235 | 61 | 0.006421 | | 2 | 0.020515 | 22 | 0.011494 | 42 | 0.008113 | 62 | 0.006314 | | 3 | 0.020079 | 23 | 0.011292 | 43 | 0.008018 | 63 | 0.006175 | | 4 | 0.019516 | 24 | 0.010990 | 44 | 0.007906 | 64 | 0.006072 | | 5 | 0.018997 | 25 | 0.010761 | 45 | 0.007798 | 65 | 0.005981 | | 6 | 0.018646 | 26 | 0.010546 | 46 | 0.007713 | 66 | 0.005885 | | 7 | 0.018314 | 27 | 0.010321 | 47 | 0.007612 | 67 | 0.005791 | | 8 | 0.017997 | 28 | 0.010151 | 48 | 0.007524 | 68 | 0.005732 | | 9 | 0.017584 | 29 | 0.009949 | 49 | 0.007430 | 69 | 0.005668 | | 10 | 0.017197 | 30 | 0.009740 | 50 | 0.007340 | 70 | 0.005596 | | 11 | 0.016551 | 31 | 0.009597 | 51 | 0.007268 | 71 | 0.005316 | | 12 | 0.015729 | 32 | 0.009425 | 52 | 0.007184 | 72 | 0.005049 | | 13 | 0.015229 | 33 | 0.009278 | 53 | 0.007116 | 73 | 0.004796 | | 14 | 0.014580 | 34 | 0.009123 | 54 | 0.007029 | 74 | 0.004555 | | 15 | 0.014008 | 35 | 0.008974 | 55 | 0.006945 | 75 | 0.004327 | | 16 | 0.013650 | 36 | 0.008847 | 56 | 0.006884 | 76 | 0.004110 | | 17 | 0.013175 | 37 | 0.008698 | 57 | 0.006805 | 77 | 0.003903 | | 18 | 0.012832 | 38 | 0.008581 | 58 | 0.006747 | 78 | 0.003708 | | 19 | 0.012475 | 39 | 0.008457 | 59 | 0.006667 | 79 | 0.003522 | | 20 | 0.012073 | 40 | 0.008338 | 60 | 0.006600 | 80 | 0.003345 |   *Last edited by Whitetooth : 04/22/11 at 5:45 PM.* |
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