In-Context Learning Standard MLP	Seed 0 EV: 91%	Seed 52 EV: 90%	Seed 105 EV: 92%	Seed 157 EV: 89%	Seed 210 EV: 92%	Seed 263 EV: 92%	Seed 315 EV: 90%	Seed 368 EV: 90%	Seed 421 EV: 90%	Seed 473 EV: 90%	Seed 526 EV: 89%	Seed 578 EV: 90%	Seed 631 EV: 91%	Seed 684 EV: 90%	Seed 736 EV: 90%	Seed 789 EV: 90%	Seed 842 EV: 91%	Seed 894 EV: 90%	Seed 947 EV: 91%	Seed 1000 EV: 89%
In-Context Learning Harmonic MLP	EV: 100% EV: 71%	EV: 100% EV: 76%	EV: 100% EV: 68%	EV: 100% EV: 79%	EV: 100% EV: 80%	EV: 100% EV: 73%	EV: 100% EV: 76%	EV: 100% EV: 73%	EV: 100% EV: 71%	EV: 100% EV: 76%	EV: 100% EV: 73%	EV: 100%	EV: 100%	EV: 100%	EV: 100% EV: 77%	EV: 100%				
In-Context Learning Standard Transformer	EV: 100%	EV: 99%	EV: 100%	EV: 100%	EV: 100%	EV: 100%														
In-Context Learning Harmonic Transformer	EV: 46%	EV: 42%	EV: 36%	EV: 46%	EV: 51%	EV: 47%	EV: 44%	EV: 41%	EV: 45%	EV: 49%	EV: 39%	EV: 35%	EV: 45%	EV: 51%	EV: 61%	EV: 51%	EV: 63%	EV: 37%	EV: 43%	EV: 58%
Modular Addition Standard MLP	EV: 100%	EV: 59%	EV: 100%	EV: 59%	EV: 100%	EV: 54%	EV: 100%	EV: 53%	EV: 51%	EV: 61%										
Modular Addition Harmonic MLP	EV: 57%	EV: 45%	EV: 60%	EV: 80%	EV: 72%	EV: 66%	EV: 68%	EV: 67%	EV: 61%	EV: 58%	EV: 38%	EV: 80%	EV: 44%	EV: 63%	EV: 51%	EV: 64%	EV: 71%	EV: 51%	EV: 57%	EV: 43%
Modular Addition Standard Transformer	EV: 62%	EV: 30%	EV: 50%	EV: 89%	EV: 64%	EV: 59%	EV: 62%	EV: 57%	EV: 70%	EV: 36%	EV: 91%	EV: 55%	EV: 95%	EV: 47%	EV: 96%	EV: 89%	EV: 95%	EV: 87%	EV: 88%	EV: 64%
Modular Addition Harmonic Transformer	EV: 95%	EV: 96%	EV: 97%	EV: 97%	EV: 96%	EV: 86%	EV: 89%	EV: 97%	EV: 98%	EV: 97%	EV: 96%	EV: 96%	EV: 97%	EV: 89%	EV: 98%	EV: 91%	EV: 94%	EV: 97%	EV: 97%	EV: 98%
Equivalence Classes Standard MLP	EV: 64%	EV: 92%	EV: 89%	EV: 83%	EV: 83%	EV: 83%	EV: 91%	EV: 87%	EV: 66%	EV: 79%	EV: 84%	EV: 81%	EV: 72%	EV: 65%	EV: 64%	EV: 65%	EV: 84%	EV: 80%	EV: 76%	EV: 80%
Equivalence Classes Harmonic MLP	EV: 88%	EV: 93%	EV: 91%	EV: 89%	EV: 88%	EV: 97%	EV: 91%	EV: 87%	EV: 94%	EV: 93%	EV: 91%	EV: 87%	EV: 93%	EV: 94%	EV: 92%	EV: 90%	EV: 93%	EV: 94%	EV: 93%	EV: 89%
Equivalence Classes Standard Transformer	EV: 94%	EV: 82%	EV: 95%	EV: 88%	EV: 97%	EV: 94%	EV: 90%	EV: 97%	EV: 95%	EV: 84%	EV: 94%	EV: 96%	EV: 91%	EV: 92%	EV: 96%	EV: 93%	EV: 85%	EV: 79%	EV: 95%	EV: 95%
Equivalence Classes Harmonic Transformer	EV: 29%	EV: 27%	EV: 27%	EV: 28%	EV: 30%	EV: 30%	EV: 30%	EV: 29%	EV: 30%	EV: 29%	EV: 28%	EV: 29%	EV: 32%	EV: 30%	EV: 27%	EV: 29%	EV: 29%	EV: 29%	EV: 31%	EV: 30%
Genealogy Learning Standard MLP	EV: 47%	EV: 50%	EV: 55%	EV: 54%	EV: 53%	EV: 54%	EV: 55%	EV: 52%	EV: 54%	EV: 47%	EV: 44%	EV: 49%	EV: 60%	EV: 46%	EV: 57%	EV: 50%	EV: 45%	EV: 57%	EV: 44%	EV: 41%
Genealogy Learning Harmonic MLP	EV: 24%	EV: 25%	EV: 25%	EV: 26%	EV: 24%	EV: 26%	EV: 26%	EV: 27%	EV: 26%	EV: 24%	EV: 25%	EV: 26%	EV: 26%	EV: 24%	EV: 24%	EV: 25%	EV: 26%	EV: 27%	EV: 26%	EV: 27%
Genealogy Learning Standard Transformer	EV: 36%	EV: 35%	EV: 38%	EV: 46%	EV: 42%	EV: 40%	EV: 39%	EV: 36%	EV: 43%	EV: 42%	EV: 44%	EV: 35%	EV: 39%	EV: 42%	EV: 42%	EV: 38%	EV: 34%	EV: 39%	EV: 44%	EV: 37%
Genealogy Learning Harmonic Transformer	EV: 39%	EV: 36%	EV: 40%	EV: 32%	EV: 38%	EV: 35%	EV: 38%	EV: 35%	EV: 41%	EV: 46%	EV: 33%	EV: 40%	EV: 40%	EV: 40%	EV: 34%	EV: 42%	EV: 33%	EV: 40%	EV: 32%	EV: 40%
Permutation Groups Standard MLP	EV: 34%	EV: 27%	EV: 39%	EV: 33%	EV: 43%	EV: 28%	EV: 83%	EV: 31%	EV: 61%	EV: 40%	EV: 86%	EV: 31%	EV: 46%	EV: 60%	EV: 36%	EV: 35%	EV: 31%	EV: 32%	EV: 40%	EV: 52%
Permutation Groups Harmonic MLP	EV: 32%	EV: 41%	EV: 34%	EV: 29%	EV: 39%	EV: 29%	EV: 31%	EV: 34%	EV: 29%	EV: 32%	EV: 35%	EV: 35%	EV: 29%	EV: 30%	EV: 29%	EV: 33%	EV: 34%	EV: 37%	EV: 30%	EV: 34%
Permutation Groups Standard Transformer	EV: 36%	EV: 41%	EV: 39%	EV: 34%	EV: 33%	EV: 37%	EV: 39%	EV: 33%	EV: 31%	EV: 27%	EV: 38%	EV: 42%	EV: 37%	EV: 42%	EV: 39%	EV: 37%	EV: 32%	EV: 39%	EV: 36%	EV: 35%
Permutation Groups Harmonic Transformer												300								3