

Table 5: Comparison among Qwen3-14B-Base, Qwen3-30B-A3B-Base, and other strong open-source baselines. The highest and second-best scores are shown in bold and underlined, respectively.

	Gemma-3-12B Base	Qwen2.5-14B Base	Qwen2.5-32B Base	Qwen2.5-Turbo Base	Qwen3-14B Base	Qwen3-30B-A3B Base
Architecture	Dense	Dense	Dense	MoE	Dense	MoE
# Total Params	12B	14B	32B	42B	14B	30B
# Activated Params	12B	14B	32B	6B	14B	3B
<i>General Tasks</i>						
MMLU	73.87	79.66	83.32	79.50	81.05	<u>81.38</u>
MMLU-Redux	70.70	76.64	81.97	77.11	79.88	<u>81.17</u>
MMLU-Pro	44.91	51.16	55.10	55.60	<u>61.03</u>	61.49
SuperGPQA	24.61	30.68	33.55	31.19	<u>34.27</u>	35.72
BBH	74.28	78.18	84.48	76.10	<u>81.07</u>	<u>81.54</u>
<i>Math & STEM Tasks</i>						
GPQA	31.31	32.83	47.97	41.41	39.90	<u>43.94</u>
GSM8K	78.01	90.22	92.87	88.32	<u>92.49</u>	91.81
MATH	44.43	55.64	57.70	55.60	62.02	<u>59.04</u>
<i>Coding Tasks</i>						
EvalPlus	52.65	60.70	66.25	61.23	72.23	<u>71.45</u>
MultiPL-E	43.03	54.79	58.30	53.24	<u>61.69</u>	66.53
MBPP	60.60	69.00	<u>73.60</u>	67.60	73.40	74.40
CRUX-O	52.00	61.10	<u>67.80</u>	60.20	68.60	67.20
<i>Multilingual Tasks</i>						
MGSM	64.35	74.68	78.12	70.45	79.20	<u>79.11</u>
MMMLU	72.50	78.34	82.40	79.76	79.69	<u>81.46</u>
INCLUDE	63.34	60.26	64.35	59.25	<u>64.55</u>	67.00

Table 6: Comparison among Qwen8B-Base and other strong open-source baselines. The highest and second-best scores are shown in bold and underlined, respectively.

	Llama-3-8B Base	Qwen2.5-7B Base	Qwen2.5-14B Base	Qwen3-8B Base
Architecture	Dense	Dense	Dense	Dense
# Total Params	8B	7B	14B	8B
# Activated Params	8B	7B	14B	8B
<i>General Tasks</i>				
MMLU	66.60	74.16	79.66	76.89
MMLU-Redux	61.59	71.06	76.64	<u>76.17</u>
MMLU-Pro	35.36	45.00	<u>51.16</u>	56.73
SuperGPQA	20.54	26.34	30.68	31.64
BBH	57.70	70.40	<u>78.18</u>	78.40
<i>Math & STEM Tasks</i>				
GPQA	25.80	<u>36.36</u>	32.83	44.44
GSM8K	55.30	85.36	90.22	<u>89.84</u>
MATH	20.50	49.80	<u>55.64</u>	60.80
<i>Coding Tasks</i>				
EvalPlus	44.13	62.18	60.70	67.65
MultiPL-E	31.45	50.73	<u>54.79</u>	58.75
MBPP	48.40	63.40	<u>69.00</u>	69.80
CRUX-O	36.80	48.50	<u>61.10</u>	62.00
<i>Multilingual Tasks</i>				
MGSM	38.92	63.60	74.68	76.02
MMMLU	59.65	71.34	78.34	<u>75.72</u>
IINCLUDE	44.94	53.98	60.26	<u>59.40</u>