

Calculating Income Tax Bracket 4

1. An NHL referee makes \$175 000.00/year. How much income tax must he pay?

Step 1: Calculate how much of his earnings fall into the fourth bracket:

$$\begin{aligned} 4^{\text{th}} \text{ tax bracket earnings} &= \$175\,000.00 - \$135\,054 \\ &= \$39\,946.00 \end{aligned}$$

Step 2: Calculate how much income tax is paid in each bracket.

Income tax = first bracket tax + second bracket tax + third bracket tax + fourth bracket tax

$$\begin{aligned} &= (\text{tax rate} \times \text{first bracket pay}) + (\text{tax rate} \times \text{second bracket pay}) \\ &+ (\text{tax rate} \times \text{third bracket pay}) + (\text{tax rate} \times \text{fourth bracket pay}) \\ &= (25\% \times \$43\,561.00) + (32\% \times \$43\,562.00) \\ &\quad + (36\% \times \$47\,931.00) + (39\% \times \$39\,946.00) \\ &= (0.25 \times \$43\,561.00) + (0.32 \times \$43\,562.00) \\ &\quad + (0.36 \times \$47\,931.00) + (0.39 \times \$39\,946.00) \\ &= \$10\,890.25 + \$13\,939.84 + \$17\,255.16 + \$15\,578.94 \\ &= \$57\,664.19 \end{aligned}$$

The NHL referee must pay \$57 664.19 in income tax.