$$m = \{\{2, 2/3, 2/5\}, \{2/3, 2/5, 2/7\}, \{2/5, 2/7, 2/9\}\}$$

$$\left\{\left\{2, \frac{2}{3}, \frac{2}{5}\right\}, \left\{\frac{2}{3}, \frac{2}{5}, \frac{2}{7}\right\}, \left\{\frac{2}{5}, \frac{2}{7}, \frac{2}{9}\right\}\right\}$$

$$n = \{\text{Integrate}[1/(1 + 25x\text{^}2), \{x, -1, 1\}],$$

$$\text{Integrate}[x\text{^}2/(1 + 25x\text{^}2), \{x, -1, 1\}],$$

$$\text{Integrate}[x\text{^}4/(1 + 25x\text{^}2), \{x, -1, 1\}]\}$$

$$\left\{\frac{2\text{ArcTan}[5]}{5}, -\frac{2}{125}(-5 + \text{ArcTan}[5]), \frac{220+6\text{ArcTan}[5]}{9375}\right\}$$

$$\text{Solve}[m.\{a, b, c\} == n, \{a, b, c\}]$$

$$\left\{\left\{a \to \frac{3(-1610+2797\text{ArcTan}[5])}{10000}, b \to -\frac{21(-180+211\text{ArcTan}[5])}{1000}, c \to \frac{21(-370+399\text{ArcTan}[5])}{2000}\right\}\right\}$$