

## 工夫して計算する 1

NO. 2

名前

／10 点

◆ 次のそれぞれを工夫して計算しなさい。

(1)  $201^2$

(2)  $998^2$

(3)  $202 \times 198$

(4)  $203 \times 197$

(5)  $48 \times 14 + 48 \times 43$

(6)  $89^2 - 11^2$

(7)  $175^2 - 25^2$

(8)  $9.8^2$

(9)  $6.5^2 - 3.5^2$

(10)  $999^2 + 2 \times 999 + 1^2$

## 解答

$$\begin{aligned}(1) \quad & (200 + 1)^2 \\ &= 40000 + 400 + 1 \\ &= 40401\end{aligned}$$

$$\begin{aligned}(2) \quad & (1000 - 2)^2 \\ &= 1000000 - 4000 + 4 \\ &= 996004\end{aligned}$$

$$\begin{aligned}(3) \quad & (200 + 2)(200 - 2) \\ &= 40000 - 4 \\ &= 39996\end{aligned}$$

$$\begin{aligned}(4) \quad & (200 + 3)(200 - 3) \\ &= 40000 - 9 \\ &= 39991\end{aligned}$$

$$\begin{aligned}(5) \quad & 48 \times (14 + 43) \\ &= 48 \times 57 \\ &= 2736\end{aligned}$$

$$\begin{aligned}(6) \quad &= (89 + 11)(89 - 11) \\ &= 100 \times 78 \\ &= 7800\end{aligned}$$

$$\begin{aligned}(7) \quad &= (175 + 25)(175 - 25) \\ &= 200 \times 150 \\ &= 30000\end{aligned}$$

$$\begin{aligned}(8) \quad & (10 - 0.2)^2 \\ &= 100 - 4 + 0.04 \\ &= 96.04\end{aligned}$$

$$\begin{aligned}(9) \quad &= (6.5 + 3.5)(6.5 - 3.5) \\ &= 10 \times 3 \\ &= 30\end{aligned}$$

$$\begin{aligned}(10) \quad & (999 + 1)^2 \\ &= 1000^2 \\ &= 1000000\end{aligned}$$