問題1. 次の計算をせよ。

$$(1) \ \frac{2}{13} \times \frac{47}{53} + \frac{11}{13} \times \frac{47}{53}$$

(2)
$$\frac{7}{6} \times \frac{3}{5} + \left(\frac{2}{3} + \frac{1}{2}\right) \times \frac{2}{5} - 1$$

(3)
$$\left(0.28 - \frac{1}{5}\right) \div \left(0.4 + \frac{2}{3}\right)$$

$$(4) \ 0.32 \times 0.25$$

$$(5) \ \frac{1}{2} - \frac{1}{3} + \frac{1}{4} - \frac{1}{5}$$

(6)
$$103 \times 97$$

(7)
$$\left(\frac{1}{3} - \frac{2}{7}\right) \times (-63)$$

$$(8) \ 0.104 \times 0.125$$

(9)
$$0.375 \times \frac{5}{12} + \frac{1}{8} \times \frac{5}{12}$$

(10)
$$\frac{1}{1 \cdot 2} + \frac{1}{2 \cdot 3} + \frac{1}{3 \cdot 4} + \frac{1}{4 \cdot 5}$$

(11)
$$1.75 \div \frac{7}{3} - \frac{3}{4} \times \frac{1}{5}$$

$$(12) \left(\frac{1}{6} - 0.075\right) \div 0.0125$$

問題 2. 次の方程式を解け。

$$(1) \quad \frac{x}{3} - \frac{x}{2} + 1 = 0$$

(2)
$$3(x-4) = 7(3+x)$$

$$(3) \quad 2x + 6 - 3(x - 4) = 0$$

$$(4) \quad 5x + 3 = -5(1 - x) - 2$$

(5)
$$\frac{x}{2} - \frac{x-1}{3} + \frac{x-2}{4} = 1$$