

例) 例にならって、①と□^{あた}いの値を求めなさい。

例)

$$\begin{array}{r} \left\{ \begin{array}{l} \textcircled{1} + \square{6} = 400 \\ \textcircled{1} + \square{4} = 300 \end{array} \right. \\ \hline \square{2} = 100 \\ \square{1} = \underline{50} \\ \square{4} = 200 \\ \textcircled{1} = \underline{100} \end{array}$$

マルの数が同じなので、
2本の式の差をとると、
マルが消去され、□が求
められます。

<2本の式の差をとる>

$$(1) \begin{cases} \textcircled{1} + \square{7} = 380 \\ \textcircled{1} + \square{4} = 260 \end{cases}$$

$$(2) \begin{cases} \textcircled{1} + \square{3} = 500 \\ \textcircled{1} + \square{5} = 680 \end{cases}$$

例)

$$\begin{array}{r} \left. \begin{array}{l} \textcircled{2} + \square = 500 \\ \textcircled{1} + \square = 300 \end{array} \right\} \\ \hline \begin{array}{l} \textcircled{2} + \square = 500 \\ \textcircled{2} + 8 = 600 \end{array} \end{array}$$

×2

○も□も数が違うため、
1本の式を何倍かして、
片方の数をそろえます。

$$\square = 100$$

$$\square = \underline{50}$$

$$\square = 200$$

$$\textcircled{1} = \underline{100}$$

<1本の式を何倍かして、片方の数をそろえる>

$$(3) \quad \begin{cases} \textcircled{2} + \square = 480 \\ \textcircled{1} + \square = 660 \end{cases}$$

$$(4) \quad \begin{cases} \textcircled{2} + \square = 310 \\ \textcircled{6} + \square = 600 \end{cases}$$

例)

$$\begin{array}{r}
 \textcircled{2} + \square = 700 \\
 \times 3 \quad \left\{ \begin{array}{l} \textcircled{2} + \square = 700 \\ \textcircled{3} + \square = 550 \end{array} \right. \\
 \hline
 \textcircled{3} + \square = 550 \\
 \times 2 \quad \left\{ \begin{array}{l} \textcircled{3} + \square = 550 \\ \textcircled{6} + 18 = 2100 \end{array} \right. \\
 \hline
 \textcircled{6} + 18 = 2100 \\
 \textcircled{6} + \square = 1100 \\
 \hline
 \textcircled{6} + 18 = 2100 \\
 - \textcircled{6} + \square = 1100 \\
 \hline
 \square = 1000
 \end{array}$$

○も□も数が違うので、
2本の式をそれぞれ何
倍かして、片方の数を最
小公倍数にそろえます。

$$\square = 1000$$

$$\square = 100$$

$$\square = 400$$

$$\textcircled{3} = 150$$

$$\textcircled{1} = 50$$

< 2本の式を何倍かして、片方の数を最小公倍数にそろえる >

$$(5) \quad \left\{ \begin{array}{l} \textcircled{3} + \square = 1350 \\ \textcircled{2} + \square = 1300 \end{array} \right.$$

$$(6) \quad \left\{ \begin{array}{l} \textcircled{4} + \square = 430 \\ \textcircled{5} + \square = 550 \end{array} \right.$$

$$\text{例)} \begin{cases} \textcircled{1} + \boxed{3} = 250 \\ \textcircled{1} = \boxed{2} \end{cases}$$

片方の数がそろっているのに着目します。

①が $\boxed{2}$ に等しいので、

1本目の式の①の代わりに、 $\boxed{2}$ を代入だいにゆうします。

$$\boxed{2} + \boxed{3} = 250$$

$$\boxed{5} = 250$$

$$\boxed{1} = \underline{50}$$

$$\boxed{2} = 100$$

$$\textcircled{1} = \underline{50}$$

<そのまま代入>

$$(7) \begin{cases} \textcircled{1} + \boxed{4} = 1080 \\ \textcircled{1} = \boxed{5} \end{cases}$$

$$(8) \begin{cases} \textcircled{2} + \boxed{5} = 1600 \\ \textcircled{2} = \boxed{3} \end{cases}$$

$$\text{例)} \begin{cases} \textcircled{1} + \boxed{3} = 300 \\ \textcircled{1} = \boxed{2} + 50 \end{cases}$$

片方の数がそろってるのに着目します。

①が $\boxed{2} + 50$ に等しいので、

1本目の式の①の代わりに、 $\boxed{2} + 50$ を代入。

$$\boxed{2} + 50 + \boxed{3} = 300$$

$$\boxed{5} + 50 = 300$$

$$\boxed{5} = 250$$

$$\boxed{1} = \underline{50}$$

$$\boxed{2} = 100$$

$$\textcircled{1} = \underline{150}$$

<そのまま代入>

$$(9) \begin{cases} \textcircled{8} + \boxed{6} = 560 \\ \textcircled{8} = \boxed{3} + 20 \end{cases}$$

$$(10) \begin{cases} \textcircled{2} + \boxed{5} = 540 \\ \textcircled{2} = \boxed{3} - 100 \end{cases}$$

$$\text{例)} \quad \left\{ \begin{array}{l} \textcircled{2} + \boxed{6} = 500 \\ \textcircled{1} = \boxed{2} \xrightarrow{\times 2} \textcircled{2} = \boxed{4} \end{array} \right.$$

片方の数がそろっていないので、式を何倍かして、数をむりやりそろえます。

①が2に等しいので、②は4に等しい。

1本目の式の②の代わりに、4を代入します。

$$\boxed{4} + \boxed{6} = 500$$

$$\boxed{10} = 250$$

$$\boxed{1} = \underline{50}$$

$$\boxed{2} = 100$$

$$\textcircled{1} = \underline{100}$$

<何倍かして数をそろえてから代入>

$$(11) \quad \left\{ \begin{array}{l} \textcircled{2} + \boxed{5} = 1100 \\ \textcircled{1} = \boxed{3} \end{array} \right.$$

$$(12) \quad \left\{ \begin{array}{l} \textcircled{3} + \boxed{7} = 780 \\ \textcircled{1} = \boxed{2} \end{array} \right.$$

$$\text{例)} \begin{cases} \textcircled{2} + \boxed{6} = 480 \\ \textcircled{1} = \boxed{2} - 10 \xrightarrow{\times 2} \textcircled{2} = \boxed{4} - 20 \end{cases}$$

片方の数がそろっていないので、式を何倍かして、数をむりやりそろえます。

①が $\boxed{2} - 10$ に等しいので、②は $\boxed{4} - 20$ に等しい。

1本目の式の②の代わりに、 $\boxed{4} - 10$ を代入。

$$\boxed{4} - 20 + \boxed{6} = 480$$

$$\boxed{10} - 20 = 480$$

$$\boxed{10} = 500$$

$$\boxed{1} = \underline{50}$$

$$\textcircled{1} = 90$$

$$(13) \begin{cases} \textcircled{8} + \boxed{5} = 1150 \\ \textcircled{2} = \boxed{3} - 10 \end{cases}$$

$$(14) \begin{cases} \textcircled{6} + \boxed{5} = 760 \\ \textcircled{2} = \boxed{3} - 120 \end{cases}$$

$$\text{例)} \begin{cases} \textcircled{1} + \boxed{4} = 110 \xrightarrow{\times 2} \textcircled{2} + \boxed{8} = 220 \\ \textcircled{2} = \boxed{3} \end{cases}$$

片方の数がそろっていないので、式を何倍かして、数をむりやりそろえます。

今回は上の式を2倍して○の数をそろえます。

上の式の②の代わりに3を代入します。

$$\boxed{3} + \boxed{8} = 220$$

$$\boxed{11} = 220$$

$$\boxed{1} = \underline{20}$$

$$\textcircled{1} = \underline{30}$$

$$(15) \begin{cases} \textcircled{1} + \boxed{8} = 320 \\ \textcircled{2} = \boxed{3} + 70 \end{cases}$$

$$(16) \begin{cases} \textcircled{3} + \boxed{2} = 470 \\ \textcircled{9} = \boxed{3} + 240 \end{cases}$$

2 りんご1個の値段を①円、みかん1個の値段を①円とおいて、次の問題を解きなさい。

- (1) りんご3個とみかん5個を買うと1350円、りんご2個とみかん6個を買うと1300円かかります。りんご1個とみかん1個の値段はそれぞれ何円ですか。

- (2) りんご1個の値段はみかん3個の値段に等しく、りんご2個とみかん5個を買うと1100円かかります。りんご1個とみかん1個の値段はそれぞれ何円ですか。

(3) りんご2個の値段はみかん3個の値段より20円安く、りんご8個とみかん5個を買うと2300円かかります。りんご1個とみかん1個の値段はそれぞれ何円ですか。

(4) りんご2個の値段はみかん3個の値段より210円高く、りんご1個とみかん8個を買うと960円かかります。りんご1個とみかん1個の値段はそれぞれ何円ですか。

■ 解答・解説 ■

$$\begin{array}{l} \text{I} \quad (1) \quad \textcircled{1} + \boxed{7} = 380 \\ \quad \quad \textcircled{1} + \boxed{4} = 260 \\ \hline \quad \quad \boxed{3} = 120 \\ \quad \quad \boxed{1} = 40 \\ \quad \quad \textcircled{1} = \underline{100} \end{array}$$

$$\begin{array}{l} (2) \quad \textcircled{1} + \boxed{3} = 500 \\ \quad \quad \textcircled{1} + \boxed{5} = 680 \\ \hline \quad \quad \boxed{2} = 180 \\ \quad \quad \boxed{1} = 90 \\ \quad \quad \textcircled{1} = \underline{230} \end{array}$$

$$\begin{array}{l} (3) \quad \textcircled{2} + \boxed{3} = 480 \\ \quad \quad \textcircled{1} + \boxed{5} = 660 \\ \hline \quad \quad \textcircled{2} + \boxed{3} = 480 \\ \quad \quad \textcircled{2} + \boxed{10} = 1320 \\ \hline \quad \quad \boxed{7} = 840 \\ \quad \quad \boxed{1} = 120 \\ \quad \quad \textcircled{1} = \underline{60} \end{array}$$

$$\begin{array}{l} (4) \quad \textcircled{2} + \boxed{5} = 310 \\ \quad \quad \textcircled{6} + \boxed{4} = 600 \\ \hline \quad \quad \textcircled{6} + \boxed{15} = 930 \\ \quad \quad \textcircled{6} + \boxed{4} = 600 \\ \hline \quad \quad \boxed{11} = 330 \\ \quad \quad \boxed{1} = 30 \\ \quad \quad \textcircled{1} = \underline{80} \end{array}$$

$$\begin{array}{l} (5) \quad \textcircled{3} + \boxed{5} = 1350 \\ \quad \quad \textcircled{2} + \boxed{6} = 1300 \\ \hline \quad \quad \textcircled{6} + \boxed{10} = 2700 \\ \quad \quad \textcircled{6} + \boxed{18} = 3900 \\ \hline \quad \quad \boxed{8} = 1200 \\ \quad \quad \boxed{1} = 150 \\ \quad \quad \textcircled{1} = \underline{200} \end{array}$$

$$\begin{array}{l} (6) \quad \textcircled{4} + \boxed{3} = 430 \\ \quad \quad \textcircled{5} + \boxed{4} = 550 \\ \hline \quad \quad \textcircled{6} + \boxed{12} = 1720 \\ \quad \quad \textcircled{5} + \boxed{12} = 1650 \\ \hline \quad \quad \textcircled{1} = 70 \\ \quad \quad \boxed{1} = 50 \end{array}$$

$$\begin{array}{l} (7) \quad \boxed{5} + \boxed{4} = 1080 \\ \quad \quad \boxed{9} = 1080 \\ \quad \quad \boxed{1} = \underline{120} \\ \quad \quad \textcircled{1} = \underline{600} \end{array}$$

$$\begin{array}{l} (8) \quad \boxed{3} + \boxed{5} = 1600 \\ \quad \quad \boxed{8} = 1600 \\ \quad \quad \boxed{1} = \underline{200} \\ \quad \quad \textcircled{1} = \underline{300} \end{array}$$

$$\begin{array}{l} (9) \quad \boxed{3} + 20 + \boxed{6} = 560 \\ \quad \quad \boxed{9} + 20 = 560 \\ \quad \quad \boxed{9} = 540 \\ \quad \quad \boxed{1} = \underline{60} \\ \quad \quad \textcircled{1} = \underline{25} \end{array}$$

$$\begin{array}{l} (10) \quad \boxed{3} - 100 + \boxed{5} = 540 \\ \quad \quad \boxed{8} - 100 = 540 \\ \quad \quad \boxed{8} = 640 \\ \quad \quad \boxed{1} = \underline{80} \\ \quad \quad \textcircled{1} = \underline{70} \end{array}$$

$$\begin{array}{l} (11) \quad \left\{ \begin{array}{l} \textcircled{2} + \boxed{5} = 1100 \\ \textcircled{1} = \boxed{3} \rightarrow \textcircled{2} = \boxed{6} \end{array} \right. \\ \quad \quad \boxed{6} + \boxed{5} = 1100 \\ \quad \quad \boxed{11} = 1100 \\ \quad \quad \boxed{1} = 100 \\ \quad \quad \textcircled{1} = \underline{300} \end{array}$$

$$\begin{array}{l} (12) \quad \left\{ \begin{array}{l} \textcircled{3} + \boxed{7} = 780 \\ \textcircled{1} = \boxed{2} \rightarrow \textcircled{3} = \boxed{6} \end{array} \right. \\ \quad \quad \boxed{6} + \boxed{7} = 780 \\ \quad \quad \boxed{13} = 780 \\ \quad \quad \boxed{1} = 60 \\ \quad \quad \textcircled{1} = \underline{120} \end{array}$$

(13)
$$\begin{cases} \textcircled{8} + \boxed{5} = 1150 \\ \textcircled{2} = \boxed{3} - 10 \rightarrow \textcircled{8} = \boxed{12} - 40 \end{cases}$$

$$\boxed{12} - 40 + \boxed{5} = 1150$$

$$\boxed{17} - 40 = 1150$$

$$\boxed{17} = 1190$$

$$\boxed{1} = \underline{70}$$

$$\textcircled{1} = \underline{100}$$

(14)
$$\begin{cases} \textcircled{6} + \boxed{5} = 760 \\ \textcircled{2} = \boxed{3} - 120 \rightarrow \textcircled{6} = \boxed{9} - 360 \end{cases}$$

$$\boxed{9} - 360 + \boxed{5} = 760$$

$$\boxed{14} - 360 = 760$$

$$\boxed{14} = 1120$$

$$\boxed{1} = \underline{80}$$

$$\textcircled{1} = \underline{60}$$

(15)
$$\begin{cases} \textcircled{1} + \boxed{8} = 320 \rightarrow \textcircled{2} + \boxed{16} = 640 \\ \textcircled{2} = \boxed{3} + 70 \end{cases}$$

$$\boxed{3} + 70 + \boxed{16} = 640$$

$$\boxed{19} + 70 = 640$$

$$\boxed{19} = 570$$

$$\boxed{1} = \underline{30}$$

$$\textcircled{1} = \underline{80}$$

(16)
$$\begin{cases} \textcircled{3} + \boxed{2} = 470 \rightarrow \textcircled{9} + \boxed{6} = 1410 \\ \textcircled{9} = \boxed{3} + 240 \end{cases}$$

$$\boxed{3} + 240 + \boxed{6} = 1410$$

$$\boxed{9} + 240 = 1410$$

$$\boxed{9} = 1170$$

$$\boxed{1} = \underline{130}$$

$$\textcircled{1} = \underline{70}$$

2 (1)
$$\begin{aligned} \textcircled{3} + \boxed{5} &= 1350 \\ \textcircled{2} + \boxed{6} &= 1300 \\ \hline \textcircled{6} + \boxed{10} &= 2700 \\ \textcircled{6} + \boxed{18} &= 3900 \\ \hline \boxed{8} &= 1200 \\ \boxed{1} &= \underline{150(\text{円})} \dots \text{みかん} \\ \textcircled{1} &= \underline{200(\text{円})} \dots \text{りんご} \end{aligned}$$

(2)
$$\begin{cases} \textcircled{2} + \boxed{5} = 1100 \\ \textcircled{1} = \boxed{3} \rightarrow \textcircled{2} = \boxed{6} \end{cases}$$

$$\boxed{6} + \boxed{5} = 1100$$

$$\boxed{11} = 1100$$

$$\boxed{1} = \underline{100(\text{円})} \dots \text{みかん}$$

$$\textcircled{1} = \underline{300(\text{円})} \dots \text{りんご}$$

(3)
$$\begin{cases} \textcircled{2} = \boxed{3} - 20 \rightarrow \textcircled{8} = \boxed{12} - 80 \\ \textcircled{8} + \boxed{5} = 2300 \end{cases}$$

$$\boxed{12} - 80 + \boxed{5} = 2300$$

$$\boxed{17} - 80 = 2300$$

$$\boxed{17} = 2380$$

$$\boxed{1} = \underline{140(\text{円})} \dots \text{みかん}$$

$$\textcircled{1} = \underline{200(\text{円})} \dots \text{りんご}$$

(4)
$$\begin{cases} \textcircled{2} = \boxed{3} + 210 \\ \textcircled{1} + \boxed{8} = 960 \rightarrow \textcircled{2} + \boxed{16} = 1920 \end{cases}$$

$$\boxed{3} + 210 + \boxed{16} = 1920$$

$$\boxed{19} + 210 = 1920$$

$$\boxed{19} = 1710$$

$$\boxed{1} = \underline{90(\text{円})} \dots \text{みかん}$$

$$\textcircled{1} = \underline{240(\text{円})} \dots \text{りんご}$$