臨時休校中課題　数学B　対象：3年 生普通科 選択者　（NO 2　解答）　（　　）組（　　）番　名前（　　　　　　　　）

1．次の計算をせよ。

(1) $5+4-(-12)=5+4+12$

$$=21$$

(2) $\frac{3}{4}-\frac{1}{3}+\frac{4}{6}=\frac{9}{12}-\frac{4}{12}+\frac{8}{12}$

$$=\frac{9-4+8}{12}$$

$$=\frac{13}{12}$$

(3) $\frac{7}{3}+\frac{5}{12}\div\left(-\frac{2}{3}\right)=\frac{7}{3}+\left(-\frac{5\times3}{12\times2}\right)=\frac{7}{3}+\left(-\frac{5}{8}\right)$

$$=\frac{56}{24}-\frac{15}{24}$$

$$=\frac{41}{24}$$

(4) $100-(-12)\div3\times5+7=12-(-4)\times5+7$

$$=12-(-20)+7=12+20+7$$

$$=39$$

(5) $\frac{14}{3}\div\frac{7}{2}+\frac{2}{3}\times\left(-\frac{5}{4}\right)=\frac{14\times2}{3\times7}+\left(-\frac{2\times5}{3\times4}\right)$

$$=\frac{4}{3}+\left(-\frac{5}{6}\right)=\frac{8}{6}-\frac{5}{6}$$

$$=\frac{3}{6}$$

$$=\frac{1}{2}$$

(6) $0.6\times\frac{1}{2}+\frac{7}{3}\div0.3=\frac{6}{10}\times\frac{1}{2}+\frac{7}{3}\div\frac{3}{10}$

$$=\frac{6\times1}{10\times2}+\frac{7\times10}{3\times3}$$

$$=\frac{3}{10}+\frac{70}{9}=\frac{27}{90}+\frac{700}{90}$$

$$=\frac{727}{90}$$

(7) $\frac{1}{8}\times\frac{1}{3}\div\frac{5}{12}-\frac{1}{5}\times\frac{9}{2}=\frac{1\times1}{8\times3}\div\frac{5}{12}-\frac{1\times9}{5\times2}$

$$=\frac{1\times1\times12}{8\times3\times5}-\frac{9}{10}$$

$$=\frac{1}{10}-\frac{9}{10}=\frac{1-9}{10}=\frac{-8}{10}$$

$$=-\frac{4}{5}$$

2．次の計算をせよ。

(1) $-5^2-(-4)\times6=-25-(-4)\times6$

$$=-25-(-24)=-25+24=-1$$

(2) $5^2\times3^4\div15^2=\frac{5\times5\times3\times3\times3\times3}{15\times15}$

$$=\frac{5\times5\times3\times3\times3\times3}{5\times3\times5\times3}=\frac{3\times3}{1}=9$$

(3) $\left(-\frac{1}{2}\right)^2\div\left(-\frac{3}{16}\right)\times\left(-\frac{3}{2}\right)^3$

$$=\left(-\frac{1}{2}\right)\times\left(-\frac{1}{2}\right)\div\frac{3}{16}\times\left(-\frac{3}{2}\right)\times\left(-\frac{3}{2}\right)\times\left(-\frac{3}{2}\right)$$

$$=\frac{(-1)\times(-1)\times16\times(-3)\times(-3)\times(-3)}{2\times2\times3\times2\times2\times2}$$

$$=\frac{(-1)\times(-1)\times2\times2\times2\times2\times(-3)\times(-3)\times(-3)}{2\times2\times3\times2\times2\times2}$$

$$=-\frac{3\times3}{2}=-\frac{9}{2}$$

(4) $(-5)^2-(-2)^3\times(-4)^2\div(-1)^6=25-(-8)\times16\div1$

$$=25-(-128)=25+128=153$$

(5) $4-2\times(-3)^2+2\times(-4)^2\div(-2)^3$

$$=4-2\times9+2\times16\div(-8)=4-18+32\div(-8)$$

$$=4-18+(-4)=4-18-4=-18$$

(6) $(-0.1)^3\times10^4+(-10)^2\times0.5$

$$=\left(-\frac{1}{10}\right)\times\left(-\frac{1}{10}\right)\times\left(-\frac{1}{10}\right)\times10\times10\times10\times10$$

$$+(-10)\times(-10)\times\frac{5}{10}$$

$$=-10+50=40$$

(7) $2+\left(-\frac{2}{3}\right)-\frac{1}{3}\times\left\{\left(-\frac{1}{4}\right)^2-\frac{1}{6}\div\left(-\frac{1}{3}\right)^2\right\}$

$$=2+\left(-\frac{2}{3}\right)-\frac{1}{3}\times\left\{\frac{1}{16}-\frac{1}{6}\div\frac{1}{9}\right\}$$

$$=2+\left(-\frac{2}{3}\right)-\frac{1}{3}\times\left\{\frac{1}{16}-\frac{3}{2}\right\}$$

$$=2+\left(-\frac{2}{3}\right)-\frac{1}{3}\times\left\{\frac{1}{16}-\frac{24}{16}\right\}$$

$$=2+\left(-\frac{2}{3}\right)-\frac{1}{3}\times\left\{-\frac{23}{16}\right\}=2+\left(-\frac{2}{3}\right)-\frac{23}{48}$$

$$=2-\frac{2}{3}-\frac{23}{48}=\frac{96-32-23}{48}=\frac{41}{48}$$