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$$\begin{aligned}
7. \quad & 4 \times 168.25 + 8 \times 168.125 = ? \\
& = 4 \times (168 + 0.25) + 8 \times (168 + 0.125) \\
& = (4 + 8) \times 168 + 1 + 1 \\
& = (10 + 2) \times 168 + 2 \\
& = 1680 + 336 + 2 \\
& = 2018
\end{aligned}$$

$$\begin{aligned}
8. \quad & 1982 \times 2018 = ? \\
& = (2000 - 18) \times (2000 + 18) \\
& = 2000^2 - 18^2 \\
& = 4000000 - 324 \\
& = 3999676
\end{aligned}$$

$$\begin{aligned}
9. \quad & 104 \times 125 \times 707 \times 2999 = ? \\
& = 8 \times 13 \times 125 \times 7 \times 101 \times (3000 - 1) \\
& = 8 \times 125 \times 7 \times 13 \times 101 \times (3000 - 1) \\
& = 1000 \times 91 \times 101 \times (3000 - 1) \\
& = 1000 \times 9191 \times (3000 - 1) \\
& = 2757300000 - 9191000 \\
& = 27563809000
\end{aligned}$$

$$\begin{aligned}
10. \quad & 23257418 + 5 \times 2325 \times 5 \times 7418 - 4 \times 2325 \times 4 \times 7418 - 3 \times 2325 \times 3 \times 7418 = ? \\
& = 23257418 + 2325 \times 7418 \times (5 \times 5 - 4 \times 4 - 3 \times 3) \\
& = 23257418 + 2325 \times 7418 \times (25 - 16 - 9) \\
& = 23257418
\end{aligned}$$

$$\begin{aligned}
11. \quad & 2.21 + 2.24 + 2.27 + \dots + 20.12 + 20.15 + 20.18 = ? \\
& = \frac{(2.21 + 20.18) \times 600}{2} \\
& = 22.39 \times 300 \\
& = 6717
\end{aligned}$$

$$\begin{aligned}
12. \quad & 27067353 \times \frac{37 + 74 + 111 + 148 + 185 + 222 + 259 + 296 + 333}{111 + 222 + 333 + 444 + 555 + 666 + 777 + 888 + 999} = ? \\
& = 27067353 \times \frac{37 \times (1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9)}{111 \times (1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9)} \\
& = 27067353 \times \frac{37}{111} \\
& = 27067353 \times \frac{1}{3} \\
& = 9022451
\end{aligned}$$

$$13. \frac{\frac{4}{5} + (1\frac{4}{5} - \frac{1}{4} - \frac{7}{20} - 0.05)}{0.3 \times (1 - \frac{1}{3} - \frac{1}{6})} = ?$$

$$= \frac{\frac{4}{5} + \frac{9}{5} - \frac{1}{4} - \frac{7}{20} - \frac{1}{20}}{0.3 \times \frac{1}{2}} = \frac{\frac{13}{5} - \frac{13}{20}}{\frac{3}{10} \times \frac{1}{2}} = \frac{13 \times (\frac{1}{5} - \frac{1}{20})}{\frac{3}{20}} = \frac{13 \times \frac{3}{20}}{\frac{3}{20}} = 13$$

$$14. 1+2-3+4+5-6+7+8-9+\cdots+2014+2015-2016+2017+2018 = ?$$

【算法 1】

$$\begin{aligned} &= (1+2-3) + (4+5-6) + (7+8-9) + \cdots + (2014+2015-2016) + (2017+2018) \\ &= 0+3+6+9+\cdots+2013+4035 \\ &= \frac{(3+2013) \times 671}{2} + 4035 \end{aligned}$$

$$= 676368 + 4035$$

$$= 680403$$

【算法 2】

$$= (1+4+7+\cdots+2017) + (2+5+8+\cdots+2018) - (3+6+9+\cdots+2016)$$

$$= \frac{(1+2017) \times 673}{2} + \frac{(2+2018) \times 673}{2} - \frac{(3+2016) \times 672}{2}$$

$$= (1009+1010) \times 673 - 2019 \times 336$$

$$= 2019 \times 673 - 2019 \times 336$$

$$= 2019 \times 337$$

$$= 680403$$

【算法 3】

$$= 1+2+3+4+5+6+7+8+9+\cdots+2016+2017+2018 - 2 \times (3+6+9+\cdots+2016)$$

$$= \frac{(1+2018) \times 2018}{2} - 2 \times \frac{(3+2016) \times 672}{2}$$

$$= 2019 \times 1009 - 2019 \times 672$$

$$= 2019 \times (1009 - 672)$$

$$= 2019 \times 337$$

$$= 680403$$

$$15. 2.018 \times (1.333 + 0.685) + 2 \times (2.018 - 0.036) \times 2.018 + 1.982 \times \frac{1}{3} \times 5.946 = ?$$

$$= 2.018 \times 2.018 + 2 \times 1.982 \times 2.018 + 1.982 \times 1.982$$

$$= (2.018 + 1.982)^2$$

$$= 4^2$$

$$= 16$$

$$\begin{aligned}
16. \quad & 201.8 \times 5.999 - 20.18 \times 59.98 + 2.018 \times 599.7 - 0.2018 \times 5996 = ? \\
& = 2018 \times 0.0001 \times (5999 - 5998 + 5997 - 5996) \\
& = 0.2018 \times 2 \\
& = 0.4036
\end{aligned}$$

$$\begin{aligned}
17. \quad & (20 - \frac{119}{720} \times 20) + (40 - \frac{119}{720} \times 40) + (60 - \frac{119}{720} \times 60) + (80 - \frac{119}{720} \times 80) \\
& + (100 - \frac{119}{720} \times 100) + (120 - \frac{119}{720} \times 120) + (140 - \frac{119}{720} \times 140) + (160 - \frac{119}{720} \times 160) = ? \\
& = 20 \times (1 - \frac{119}{720}) + 40 \times (1 - \frac{119}{720}) + 60 \times (1 - \frac{119}{720}) + 80 \times (1 - \frac{119}{720}) \\
& + 100 \times (1 - \frac{119}{720}) + 120 \times (1 - \frac{119}{720}) + 140 \times (1 - \frac{119}{720}) + 160 \times (1 - \frac{119}{720}) \\
& = (20 + 40 + 60 + 80 + 100 + 120 + 140 + 160) \times (1 - \frac{119}{720}) \\
& = 720 \times (1 - \frac{119}{720}) \\
& = 720 - 119 \\
& = 601
\end{aligned}$$

$$\begin{aligned}
18. \quad & 20182020 \times 20180408 \div 20180408 \frac{20180408}{20182019} = ? \\
& = 20182020 \times 20180408 \div (\frac{20180408 \times 20182019 + 20180408}{20182019}) \\
& = 20182020 \times 20180408 \div (\frac{20180408 \times (20182019 + 1)}{20182019}) \\
& = 20182020 \times 20180408 \div (\frac{20180408 \times 20182020}{20182019}) \\
& = 20182020 \times 20180408 \times \frac{20182019}{20180408 \times 20182020} \\
& = 20182019
\end{aligned}$$

$$\begin{aligned}
19. \quad & \frac{1}{1009 \times 1010} + \frac{1}{1010 \times 1011} + \frac{1}{1011 \times 1012} + \dots + \frac{1}{2016 \times 2017} + \frac{1}{2017 \times 2018} = ? \\
& = (\frac{1}{1009} - \frac{1}{1010}) + (\frac{1}{1010} - \frac{1}{1011}) + (\frac{1}{1011} - \frac{1}{1012}) + \dots + (\frac{1}{2016} - \frac{1}{2017}) + (\frac{1}{2017} - \frac{1}{2018}) \\
& = \frac{1}{1009} - \frac{1}{2018} \\
& = \frac{1}{2018}
\end{aligned}$$

$$20. \quad 10987654321 + 11098765432 + 21109876543 + 32110987654 + 43211098765 + 54321109876 + 65432110987 + 76543211098 + 87654321109 + 98765432110 + 9876543211 = ?$$

$$\begin{aligned}
 &= (1+2+3+4+5+6+7+8+9+0+1) \\
 &\quad + (2+3+4+5+6+7+8+9+0+1+1) \times 10 \\
 &\quad + (3+4+5+6+7+8+9+0+1+1+2) \times 100 \\
 &\quad + (4+5+6+7+8+9+0+1+1+2+3) \times 1000 \\
 &\quad + (5+6+7+8+9+0+1+1+2+3+4) \times 10000 \\
 &\quad + (6+7+8+9+0+1+1+2+3+4+5) \times 100000 \\
 &\quad + (7+8+9+0+1+1+2+3+4+5+6) \times 1000000 \\
 &\quad + (8+9+0+1+1+2+3+4+5+6+7) \times 10000000 \\
 &\quad + (9+0+1+1+2+3+4+5+6+7+8) \times 100000000 \\
 &\quad + (0+1+1+2+3+4+5+6+7+8+9) \times 1000000000 \\
 &\quad + (1+1+2+3+4+5+6+7+8+9+0) \times 1000000000 \\
 &= 46 + 460 + 4600 + 46000 + 460000 + 4600000 + 46000000 + 460000000 \\
 &\quad + 4600000000 + 46000000000 \\
 &= 511111111106
 \end{aligned}$$