

六年级“算你狠”之计算周周练（第二周）

（解析）

说明：本试卷为分为五个星级，最优为五星，老师根据学生答题情况评定星级

评星项	正确率（共四星）	书写（共一星）	总评
得分			

一、分数计算（本大题含 30 个小题，每小题 2 分，共 60 分）

- (1) $\frac{9}{5} \times \frac{1}{3} = \frac{3}{5}$

(2) $\frac{11}{6} \times \frac{3}{22} = \frac{1}{4}$
- (3) $\frac{2}{51} \times \frac{68}{3} = \frac{8}{9}$

(4) $1\frac{5}{9} \times \frac{3}{7} = \frac{2}{3}$
- (5) $1\frac{3}{11} \div \frac{7}{2} = \frac{4}{11}$

(6) $2\frac{1}{2} \div \frac{5}{4} = 2$
- (7) $2\frac{1}{4} \div 1\frac{1}{2} = \frac{3}{2}$

(8) $\frac{3}{5} \div 2\frac{2}{9} = \frac{27}{100}$
- (9) $\frac{5}{12} + \frac{5}{24} = \frac{5}{8}$

(10) $\frac{2}{3} + \frac{3}{2} = \frac{13}{6}$
- (11) $1\frac{1}{6} + 2\frac{1}{4} = 3\frac{5}{12}$

(12) $\frac{7}{10} + \frac{7}{15} = \frac{7}{6}$

- (13) $\frac{7}{12} - \frac{1}{3} = \frac{1}{4}$

(14) $\frac{17}{6} - \frac{5}{3} = \frac{7}{6}$
- (15) $5\frac{1}{2} - 2\frac{1}{3} = 3\frac{1}{6}$

(16) $2\frac{7}{12} - \frac{5}{3} = \frac{11}{12}$
- (17) $\frac{2}{5} \times \frac{15}{4} \times \frac{2}{3} = 1$

(18) $2\frac{2}{5} \div 5\frac{3}{5} \times \frac{7}{2} = \frac{3}{2}$
- (19) $\frac{13}{20} + \frac{7}{15} - \frac{11}{30} = \frac{3}{4}$

(20) $\frac{7}{13} + \frac{11}{26} - \frac{1}{39} = \frac{73}{78}$
- (21) $4\frac{2}{3} + 2\frac{3}{5} - 1\frac{1}{2} = 5\frac{23}{30}$

(22) $5 \div \frac{1}{12} + \frac{3}{4} = 60\frac{3}{4}$
- (23) $1\frac{2}{7} \times 4\frac{2}{3} - 2\frac{1}{4} = 3\frac{3}{4}$

(24) $\frac{1}{2} \div \frac{5}{4} \times \frac{10}{3} = \frac{4}{3}$
- (25) $3\frac{3}{14} \div \frac{5}{12} \div \frac{9}{7} = 6$

(26) $\frac{1}{2} + \frac{1}{3} + \frac{1}{6} = 1$
- (27) $\frac{1}{3} + \frac{1}{6} + \frac{1}{18} = \frac{5}{9}$

(28) $\frac{1}{2} + \frac{1}{3} + \frac{1}{9} + \frac{1}{18} = 1$
- (29) $\frac{1}{2} + \frac{1}{4} + \frac{1}{8} + \frac{1}{16} + \frac{1}{32} = \frac{31}{32}$

(30) $1\frac{1}{2} + 2\frac{1}{4} + 4\frac{1}{8} + 8\frac{1}{16} + 16\frac{1}{32} + 32\frac{1}{64} = 63\frac{63}{64}$

二、分数巧算 (本大题含 10 个小题, 每小题 2 分, 共 20 分)

$$(31) \left(\frac{1}{2} + \frac{1}{3} + \frac{1}{4}\right) \times 12 = \frac{1}{2} \times 12 + \frac{1}{3} \times 12 + \frac{1}{4} \times 12 = 6 + 4 + 3 = 13$$

$$(32) 39 \times \frac{148}{149} + 148 \times \frac{86}{149} + 148 \times \frac{24}{149} = \frac{148}{149} \times (39 + 86 + 24) = 148$$

$$(33) \frac{4}{7} \times 23 \frac{12}{13} + 16 \times \frac{1}{7} + \frac{1}{7} \times \frac{4}{13} = \frac{4}{7} \times \left(23 \frac{12}{13} + 4 + \frac{1}{13}\right) = 16$$

$$(34) 5 \frac{1}{2} \times \frac{1}{7} + 3 \frac{2}{3} \times \frac{1}{7} + \frac{1}{6} \times \frac{11}{7} = \frac{1}{7} \times \left(5 \frac{1}{2} + 3 \frac{2}{3} + \frac{11}{6}\right) = \frac{1}{7} \times 11 = \frac{11}{7}$$

$$(35) 2014 \frac{2014}{2015} \times 2015 \frac{2015}{2016} = \frac{2014 \times 2016}{2015} \times \frac{2015 \times 2017}{2016} = 4062238$$

$$(36) 2014 \frac{2014}{2015} \times 2015 \frac{2015}{2016} \times 2016 \frac{2016}{2017} \\ = \frac{2014 \times 2016}{2015} \times \frac{2015 \times 2017}{2016} \times \frac{2016 \times 2018}{2017} \\ = 2014 \times 2016 \times 2018 = 8193532032$$

$$(37) \frac{1}{2} \times \frac{2}{3} \times \frac{3}{4} \times \dots \times \frac{99}{100} \times 99 = \frac{99}{100}$$

$$(38) \frac{1}{3} \times \frac{3}{5} \times \frac{5}{7} \times \dots \times \frac{99}{101} \times 101 = 1$$

$$(39) \frac{1+10+2015}{3+30+6045} = \frac{1}{3}$$

$$(40) \frac{6 \times 4014 + 9 \times 4016 + \frac{1}{2}}{3 \times 4014 + 3 \times 6024 + \frac{1}{4}} = 2$$

三、分数裂项 (本大题含 10 个小题, 每小题 2 分, 共 20 分)

$$(41) \frac{1}{2 \times 3} + \frac{1}{3 \times 4} + \frac{1}{4 \times 5} + \dots + \frac{1}{49 \times 50} = \frac{1}{2} - \frac{1}{3} + \frac{1}{3} - \frac{1}{4} + \dots + \frac{1}{49} - \frac{1}{50} = \frac{1}{2} - \frac{1}{50} = \frac{12}{25}$$

$$(42) \frac{1}{1 \times 2} + \frac{1}{2 \times 3} + \frac{1}{3 \times 4} + \dots + \frac{1}{19 \times 20} = 1 - \frac{1}{2} + \frac{1}{2} - \frac{1}{3} + \dots + \frac{1}{19} - \frac{1}{20} = 1 - \frac{1}{20} = \frac{19}{20}$$

$$(43) \frac{1}{10 \times 11} + \frac{1}{11 \times 12} + \frac{1}{12 \times 13} + \dots + \frac{1}{99 \times 100} = \frac{1}{10} - \frac{1}{11} + \frac{1}{11} - \frac{1}{12} + \dots + \frac{1}{99} - \frac{1}{100} = \frac{1}{10} - \frac{1}{100} = \frac{9}{100}$$

$$(44) \frac{2}{1 \times 3} + \frac{2}{3 \times 5} + \frac{2}{5 \times 7} + \dots + \frac{2}{99 \times 101} = 1 - \frac{1}{3} + \frac{1}{3} - \frac{1}{5} + \dots + \frac{1}{99} - \frac{1}{101} = 1 - \frac{1}{101} = \frac{100}{101}$$

$$(45) \frac{1}{1 \times 3} + \frac{1}{3 \times 5} + \frac{1}{5 \times 7} + \dots + \frac{1}{49 \times 51} = \frac{1}{2} \left(1 - \frac{1}{51}\right) = \frac{25}{51}$$

$$(46) \frac{1}{1 \times 4} + \frac{1}{4 \times 7} + \frac{1}{7 \times 10} + \dots + \frac{1}{97 \times 100} = \frac{1}{3} \left(1 - \frac{1}{100}\right) = \frac{33}{100}$$

$$(47) \frac{1}{6} + \frac{1}{12} + \frac{1}{20} + \dots + \frac{1}{9900} = \frac{1}{2} - \frac{1}{3} + \frac{1}{3} - \frac{1}{4} + \dots + \frac{1}{99} - \frac{1}{100} = \frac{1}{2} - \frac{1}{100} = \frac{49}{100}$$

$$(48) \frac{1}{3} + \frac{1}{6} + \frac{1}{10} + \frac{1}{15} + \dots + \frac{1}{5050} = 2 \times \left(\frac{1}{2} - \frac{1}{101}\right) = \frac{99}{101}$$

$$(49) \frac{5}{6} + \frac{8}{15} + \frac{7}{10} + \frac{1}{3} + \frac{3}{5} = \frac{1}{2} + \frac{1}{3} + \frac{1}{3} + \frac{1}{5} + \frac{1}{2} + \frac{1}{5} + \frac{1}{3} + \frac{3}{5} = 3$$

$$(50) \frac{1}{5} + \frac{5}{6} + \frac{5}{7} + \frac{7}{12} + \frac{9}{20} + \frac{11}{30} + \frac{19}{35} + \frac{13}{42} = \frac{1}{5} + \frac{5}{6} + \frac{5}{7} + \frac{1}{3} + \frac{1}{4} + \frac{1}{4} + \frac{1}{5} + \frac{1}{5} + \frac{2}{5} + \frac{1}{7} + \frac{1}{6} + \frac{1}{7} = 4$$