



**ALL SAINTS
CATHOLIC SCHOOL**
Growing Leaders in Mind, Body, and Spirit

Answer Key

Going into

Sixth Grade

Summer Coursework 2022

Math Skills

Name : _____

Answer key

Score : _____

Number Names

Mixed: S1

Write each number in words.

1) 172,549,634,207 one hundred seventy-two billion, five hundred forty-nine million, six hundred thirty-four thousand, two hundred seven

2) 59,273,006,168 fifty-nine billion, two hundred seventy-three million, six thousand, one hundred sixty-eight

3) 6,080,952,430 six billion, eighty million, nine hundred fifty-two thousand, four hundred thirty

4) 836,319,745,212 eight hundred thirty-six billion, three hundred nineteen million, seven hundred forty-five thousand, two hundred twelve

Write each number in standard form.

1) nine billion, seventy-seven million, three hundred sixty-eight thousand

9,077,368,000

2) forty-seven billion, one hundred twenty million, six hundred sixteen thousand, eight hundred ninety-three

47,120,616,893

3) six hundred one billion, nine hundred eighteen million, four hundred eighty-nine thousand, seven hundred fifty-six

601,918,489,756

4) two billion, eight hundred four million, six hundred forty-two thousand, ninety

2,804,642,090

Standard and Expanded Form

T1L1S1

Write in expanded form.

1) 689.435 600 + 80 + 9 + 0.4 + 0.03 + 0.005

2) 24.17 20 + 4 + 0.1 + 0.07

3) 36.9 30 + 6 + 0.9

4) 1.824 1 + 0.8 + 0.02 + 0.004

5) 709.63 700 + 9 + 0.6 + 0.03

6) 8.6 8 + 0.6

Write in standard form.

1) $200 + 10 + 6 + 0.3$ 216.3

2) $4 + 0.9 + 0.008$ 4.908

3) $50 + 2 + 0.6$ 52.6

4) $900 + 30 + 7 + 0.2 + 0.01$ 937.21

5) $80 + 8 + 0.1 + 0.05$ 88.15

6) $300 + 70 + 3 + 0.08 + 0.009$ 373.089

Answer key

Sheet 1

Round Up or Round Down

1) Round each decimal to the nearest whole number. Write whether you had to "round up" or "round down".

a) 32.6

33, round up

b) 66.21

66, round down

c) 53.93

54, round up

d) 17.2

17, round down

2) Round each decimal to the nearest tenth. Write whether you had to "round up" or "round down".

a) 71.841

71.8, round down

b) 45.47

45.5, round up

c) 20.36

20.4, round up

d) 82.713

82.7, round down

3) Round each decimal to the nearest hundredth. Write whether you had to "round up" or "round down".

a) 52.3589

52.36, round up

b) 73.414

73.41, round down

c) 87.5438

87.54, round down

d) 19.129

19.13, round up

4) Round each decimal to the nearest thousandth. Write whether you had to "round up" or "round down".

a) 21.78934

21.789, round down

b) 94.5968

94.597, round up

c) 49.4636

49.464, round up

d) 7.34541

7.345, round down

Name : _____

Answer Key

5

Order of Operations: Basic

L3E51

Solve.

1) $6 + 42 \div 2 - 15$

Ans = **12**

2) $36 - 10 \times 2 \div 5 - 11$

Ans = **21**

3) $25 \times 2 - 42 \div 6 + 18$

Ans = **61**

4) $3 + 32 \div 8 - 9$

Ans = **-2**

5) $8 + 9 - 2 \times 3$

Ans = **11**

6) $4 - 6 \times 2 \div 2 + 2$

Ans = **0**

7) $12 \div 2 \times 6 + 4 - 3$

Ans = **37**

8) $63 \div 7 \times 3 - 4$

Ans = **23**

9) $4 + 8 - 5 \times 6$

Ans = **-18**

10) $5 + 36 \div 2 \times 3 - 4$

Ans = **55**

Decimal Addition

Mixed: L2S1

Line up the decimals in vertical form and add.

1) $1.84 + 273.79$

$$\begin{array}{r} 1.84 \\ + 273.79 \\ \hline 275.63 \end{array}$$

2) $54.631 + 987.205$

$$\begin{array}{r} 54.631 \\ + 987.205 \\ \hline 1041.836 \end{array}$$

3) $2.967 + 52.8$

$$\begin{array}{r} 2.967 \\ + 52.800 \\ \hline 55.767 \end{array}$$

4) $30.72 + 9.6$

$$\begin{array}{r} 30.72 \\ + 9.60 \\ \hline 40.32 \end{array}$$

5) $97.1 + 605.382$

$$\begin{array}{r} 97.100 \\ + 605.382 \\ \hline 702.482 \end{array}$$

6) $491.52 + 4.07$

$$\begin{array}{r} 491.52 \\ + 4.07 \\ \hline 495.59 \end{array}$$

7) $89 + 40.35$

$$\begin{array}{r} 89.00 \\ + 40.35 \\ \hline 129.35 \end{array}$$

8) $761.986 + 25.8$

$$\begin{array}{r} 761.986 \\ + 25.800 \\ \hline 787.786 \end{array}$$

Name : _____

Answer key

5/6

Decimal Subtraction

Mixed: L1S1

Line up the decimals in vertical form and subtract.

1) $3.61 - 0.64$

$$\begin{array}{r} 3.61 \\ - 0.64 \\ \hline 2.97 \end{array}$$

2) $54.9 - 12.75$

$$\begin{array}{r} 54.90 \\ - 12.75 \\ \hline 42.15 \end{array}$$

3) $80.13 - 6.7$

$$\begin{array}{r} 80.13 \\ - 6.70 \\ \hline 73.43 \end{array}$$

4) $910.56 - 13.04$

$$\begin{array}{r} 910.56 \\ - 13.04 \\ \hline 897.52 \end{array}$$

5) $228.1 - 7.29$

$$\begin{array}{r} 228.10 \\ - 7.29 \\ \hline 220.81 \end{array}$$

6) $72.2 - 53.6$

$$\begin{array}{r} 72.2 \\ - 53.6 \\ \hline 18.6 \end{array}$$

7) $195.9 - 3.5$

$$\begin{array}{r} 195.9 \\ - 3.5 \\ \hline 192.4 \end{array}$$

8) $498.07 - 264.1$

$$\begin{array}{r} 498.07 \\ - 264.10 \\ \hline 233.97 \end{array}$$

Name : _____

Answer Key

5/6

Adding Like Fractions

All fractions: 51

$$1) \frac{13}{10} + \frac{7}{10} = \frac{20}{10} = 2$$

$$2) \frac{24}{18} + \frac{30}{18} = \frac{54}{18} = 3$$

$$3) 5\frac{1}{3} + \frac{1}{3} = 5\frac{2}{3}$$

$$4) 6\frac{2}{9} + 6\frac{3}{9} = 12\frac{5}{9}$$

$$5) \frac{2}{13} + \frac{3}{13} = \frac{5}{13}$$

$$6) \frac{3}{2} + 8\frac{1}{2} = 8\frac{4}{2} = 10$$

$$7) 6\frac{4}{7} + 2\frac{3}{7} = 8\frac{7}{7} = 9$$

$$8) \frac{20}{19} + \frac{15}{19} = \frac{35}{19}$$

$$9) \frac{7}{11} + \frac{5}{11} = \frac{12}{11}$$

$$10) \frac{2}{5} + 9\frac{2}{5} = 9\frac{4}{5}$$

$$11) 3\frac{1}{8} + \frac{9}{8} = 3\frac{10}{8} = 4\frac{1}{4}$$

$$12) 2\frac{11}{20} + 4\frac{8}{20} = 6\frac{19}{20}$$

$$13) \frac{19}{16} + \frac{29}{16} = \frac{48}{16} = 3$$

$$14) \frac{1}{4} + \frac{3}{4} = \frac{4}{4} = 1$$

Name : _____

Answer Key

5/6

Adding Unit Fractions

Proper: S1

$$1) \frac{1}{14} + \frac{1}{14} = \frac{2}{14} = \frac{1}{7}$$

$$2) \frac{1}{3} + \frac{1}{7} = \frac{10}{21}$$

$$3) \frac{1}{2} + \frac{1}{3} = \frac{5}{6}$$

$$4) \frac{1}{15} + \frac{1}{6} = \frac{7}{30}$$

$$5) \frac{1}{5} + \frac{1}{11} = \frac{16}{55}$$

$$6) \frac{1}{6} + \frac{1}{6} = \frac{2}{6} = \frac{1}{3}$$

$$7) \frac{1}{10} + \frac{1}{15} = \frac{5}{30} = \frac{1}{6}$$

$$8) \frac{1}{16} + \frac{1}{8} = \frac{3}{16}$$

$$9) \frac{1}{9} + \frac{1}{9} = \frac{2}{9}$$

$$10) \frac{1}{12} + \frac{1}{4} = \frac{4}{12} = \frac{1}{3}$$

$$11) \frac{1}{15} + \frac{1}{30} = \frac{3}{30} = \frac{1}{10}$$

$$12) \frac{1}{5} + \frac{1}{20} = \frac{5}{20} = \frac{1}{4}$$

$$13) \frac{1}{8} + \frac{1}{24} = \frac{4}{24} = \frac{1}{6}$$

$$14) \frac{1}{13} + \frac{1}{3} = \frac{16}{39}$$

Name : _____

Answer Key

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Adding Unit Fractions

Mixed numbers: S1

$$1) 5\frac{1}{2} + 3\frac{1}{13} = 8\frac{15}{26}$$

$$2) 2\frac{1}{4} + 9\frac{1}{4} = 11\frac{2}{4} = 11\frac{1}{2}$$

$$3) 4\frac{1}{6} + 9\frac{1}{3} = 13\frac{3}{6} = 13\frac{1}{2}$$

$$4) 8\frac{1}{12} + 7\frac{1}{24} = 15\frac{3}{24} = 15\frac{1}{8}$$

$$5) 7\frac{1}{3} + 2\frac{1}{19} = 9\frac{22}{57}$$

$$6) 5\frac{1}{5} + 3\frac{1}{4} = 8\frac{9}{20}$$

$$7) 2\frac{1}{5} + 4\frac{1}{15} = 6\frac{4}{15}$$

$$8) 9\frac{1}{3} + 8\frac{1}{3} = 17\frac{2}{3}$$

$$9) 6\frac{1}{18} + 5\frac{1}{6} = 11\frac{4}{18} = 11\frac{2}{9}$$

$$10) 3\frac{1}{4} + 6\frac{1}{20} = 9\frac{6}{20} = 9\frac{3}{10}$$

$$11) 3\frac{1}{9} + 4\frac{1}{9} = 7\frac{2}{9}$$

$$12) 4\frac{1}{8} + 2\frac{1}{16} = 6\frac{3}{16}$$

$$13) 2\frac{1}{15} + 5\frac{1}{10} = 7\frac{5}{30} = 7\frac{1}{6}$$

$$14) 6\frac{1}{10} + 7\frac{1}{10} = 13\frac{2}{10} = 13\frac{1}{5}$$

Name : _____

Answer Key

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Adding Improper Fractions

MS1

$$1) \quad \frac{26}{20} + \frac{44}{20} = \left(\frac{70}{20} = \frac{7}{2} \right)$$

$$2) \quad \frac{7}{3} + \frac{9}{3} = \left(\frac{16}{3} \right)$$

$$3) \quad \frac{58}{9} + \frac{10}{9} = \left(\frac{68}{9} \right)$$

$$4) \quad \frac{52}{16} + \frac{20}{16} = \left(\frac{72}{16} = \frac{9}{2} \right)$$

$$5) \quad \frac{73}{4} + \frac{24}{4} = \left(\frac{97}{4} \right)$$

$$6) \quad \frac{19}{13} + \frac{30}{13} = \left(\frac{49}{13} \right)$$

$$7) \quad \frac{37}{17} + \frac{18}{17} = \left(\frac{55}{17} \right)$$

$$8) \quad \frac{41}{8} + \frac{15}{8} = \left(\frac{56}{8} = 7 \right)$$

$$9) \quad \frac{42}{12} + \frac{42}{12} = \left(\frac{84}{12} = 7 \right)$$

$$10) \quad \frac{6}{5} + \frac{8}{5} = \left(\frac{14}{5} \right)$$

$$11) \quad \frac{14}{2} + \frac{21}{2} = \left(\frac{35}{2} \right)$$

$$12) \quad \frac{20}{10} + \frac{30}{10} = \left(\frac{50}{10} = 5 \right)$$

$$13) \quad \frac{16}{15} + \frac{19}{15} = \left(\frac{35}{15} = \frac{7}{3} \right)$$

$$14) \quad \frac{52}{6} + \frac{7}{6} = \left(\frac{59}{6} \right)$$

Name : _____

Answer Key

5/6

Adding Unlike Fractions

All fractions: S1

$$1) 1\frac{2}{5} + 7\frac{6}{20} = 8\frac{14}{20} = 8\frac{7}{10}$$

$$2) \frac{9}{14} + \frac{3}{7} = \frac{15}{14}$$

$$3) \frac{17}{16} + \frac{9}{8} = \frac{35}{16}$$

$$4) 5\frac{5}{6} + \frac{8}{12} = 5\frac{18}{12} = 6\frac{1}{2}$$

$$5) \frac{13}{9} + 4\frac{2}{3} = 4\frac{19}{9} = 6\frac{1}{9}$$

$$6) \frac{4}{6} + \frac{11}{2} = \frac{37}{6}$$

$$7) 2\frac{2}{10} + \frac{1}{2} = 2\frac{7}{10}$$

$$8) \frac{2}{3} + \frac{13}{18} = \frac{25}{18}$$

$$9) 5\frac{6}{9} + 2\frac{2}{6} = 7\frac{18}{18} = 8$$

$$10) \frac{19}{14} + 1\frac{5}{7} = 1\frac{29}{14} = 3\frac{1}{14}$$

$$11) \frac{4}{15} + \frac{17}{10} = \frac{59}{30}$$

$$12) \frac{1}{2} + \frac{9}{18} = \frac{18}{18} = 1$$

$$13) 9\frac{3}{5} + \frac{2}{3} = 9\frac{19}{15} = 10\frac{4}{15}$$

$$14) 1\frac{2}{12} + 1\frac{1}{4} = 2\frac{5}{12}$$

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Subtracting Unit Fractions

Proper: 51

$$1) \frac{1}{4} - \frac{1}{36} = \frac{8}{36} = \frac{2}{9}$$

$$2) \frac{1}{3} - \frac{1}{18} = \frac{5}{18}$$

$$3) \frac{1}{12} - \frac{1}{16} = \frac{1}{48}$$

$$4) \frac{1}{9} - \frac{1}{15} = \frac{2}{45}$$

$$5) \frac{1}{15} - \frac{1}{20} = \frac{1}{60}$$

$$6) \frac{1}{10} - \frac{1}{14} = \frac{2}{70} = \frac{1}{35}$$

$$7) \frac{1}{2} - \frac{1}{13} = \frac{11}{26}$$

$$8) \frac{1}{4} - \frac{1}{12} = \frac{2}{12} = \frac{1}{6}$$

$$9) \frac{1}{8} - \frac{1}{11} = \frac{3}{88}$$

$$10) \frac{1}{5} - \frac{1}{30} = \frac{5}{30} = \frac{1}{6}$$

$$11) \frac{1}{3} - \frac{1}{21} = \frac{6}{21} = \frac{2}{7}$$

$$12) \frac{1}{16} - \frac{1}{20} = \frac{1}{80}$$

$$13) \frac{1}{12} - \frac{1}{18} = \frac{1}{36}$$

$$14) \frac{1}{8} - \frac{1}{22} = \frac{7}{88}$$

Name : _____

Answer Key

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Subtracting Fractions

Mixed Review: S1

$$1) \quad \frac{6}{7} - \frac{4}{5} = \frac{2}{35}$$

$$2) \quad 5\frac{3}{10} - 3\frac{7}{10} = \frac{16}{10} \text{ or } 1\frac{3}{5}$$

$$3) \quad \frac{4}{14} - \frac{3}{14} = \frac{1}{14}$$

$$4) \quad 1\frac{2}{6} - \frac{3}{6} = \frac{5}{6}$$

$$5) \quad \frac{11}{2} - \frac{7}{2} = \frac{4}{2} \text{ or } 2$$

$$6) \quad 9\frac{4}{7} - \frac{10}{7} = \frac{57}{7} \text{ or } 8\frac{1}{7}$$

$$7) \quad 9\frac{5}{8} - 6\frac{7}{8} = \frac{22}{8} \text{ or } 2\frac{3}{4}$$

$$8) \quad 5\frac{3}{4} - 4\frac{1}{3} = \frac{17}{12} \text{ or } 1\frac{5}{12}$$

$$9) \quad \frac{1}{3} - \frac{1}{7} = \frac{4}{21}$$

$$10) \quad \frac{13}{11} - \frac{10}{11} = \frac{3}{11}$$

$$11) \quad \frac{15}{12} - \frac{13}{12} = \frac{2}{12} \text{ or } \frac{1}{6}$$

$$12) \quad \frac{11}{4} - 2\frac{1}{2} = \frac{1}{4}$$

$$13) \quad 4\frac{3}{4} - \frac{4}{6} = \frac{49}{12} \text{ or } 4\frac{1}{12}$$

$$14) \quad \frac{7}{3} - \frac{6}{9} = \frac{15}{9} \text{ or } 1\frac{2}{3}$$

Name : _____

Answer Key

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Subtracting Proper Fractions

Moderate: S1

$$1) \quad \frac{4}{5} - \frac{2}{4} = \left(\frac{6}{20} - \frac{3}{10} \right)$$

$$2) \quad \frac{7}{8} - \frac{8}{10} = \left(\frac{3}{40} \right)$$

$$3) \quad \frac{8}{11} - \frac{6}{9} = \left(\frac{6}{99} - \frac{2}{33} \right)$$

$$4) \quad \frac{15}{17} - \frac{1}{2} = \left(\frac{13}{34} \right)$$

$$5) \quad \frac{2}{3} - \frac{3}{6} = \left(\frac{1}{6} \right)$$

$$6) \quad \frac{4}{7} - \frac{1}{3} = \left(\frac{5}{21} \right)$$

$$7) \quad \frac{11}{12} - \frac{7}{9} = \left(\frac{5}{36} \right)$$

$$8) \quad \frac{8}{10} - \frac{4}{18} = \left(\frac{52}{90} - \frac{26}{45} \right)$$

$$9) \quad \frac{6}{8} - \frac{1}{2} = \left(\frac{2}{8} - \frac{1}{4} \right)$$

$$10) \quad \frac{12}{15} - \frac{2}{5} = \left(\frac{6}{15} - \frac{2}{5} \right)$$

$$11) \quad \frac{10}{14} - \frac{5}{12} = \left(\frac{25}{84} \right)$$

$$12) \quad \frac{3}{4} - \frac{7}{16} = \left(\frac{5}{16} \right)$$

$$13) \quad \frac{4}{5} - \frac{11}{20} = \left(\frac{5}{20} - \frac{1}{4} \right)$$

$$14) \quad \frac{16}{18} - \frac{2}{3} = \left(\frac{4}{18} - \frac{2}{9} \right)$$

Multiplying Two Fractions

Find the product.

1) $\frac{9}{2} \times \frac{2}{3}$

$$\underline{\hspace{1.5cm} 3 \hspace{1.5cm}}$$

2) $\frac{15}{7} \times \frac{6}{12}$

$$\underline{\hspace{1.5cm} \frac{15}{14} \text{ or } 1\frac{1}{14} \hspace{1.5cm}}$$

3) $\frac{8}{14} \times \frac{7}{6}$

$$\underline{\hspace{1.5cm} \frac{2}{3} \hspace{1.5cm}}$$

4) $\frac{1}{5} \times \frac{19}{11}$

$$\underline{\hspace{1.5cm} \frac{19}{55} \hspace{1.5cm}}$$

5) $\frac{5}{18} \times \frac{4}{9}$

$$\underline{\hspace{1.5cm} \frac{10}{81} \hspace{1.5cm}}$$

6) $\frac{11}{6} \times \frac{7}{5}$

$$\underline{\hspace{1.5cm} \frac{77}{30} \text{ or } 2\frac{17}{30} \hspace{1.5cm}}$$

7) $\frac{6}{7} \times \frac{13}{7}$

$$\underline{\hspace{1.5cm} \frac{78}{49} \text{ or } 1\frac{29}{49} \hspace{1.5cm}}$$

8) $\frac{14}{15} \times \frac{3}{20}$

$$\underline{\hspace{1.5cm} \frac{7}{50} \hspace{1.5cm}}$$

Multiplying Two Mixed Numbers

Find the product.

1) $3\frac{2}{11} \times 6\frac{3}{5}$

 21

2) $5\frac{2}{4} \times 3\frac{1}{2}$

 $\frac{77}{4}$ or $19\frac{1}{4}$

3) $6\frac{2}{5} \times 2\frac{5}{8}$

 $\frac{84}{5}$ or $16\frac{4}{5}$

4) $1\frac{5}{9} \times 2\frac{3}{12}$

 $\frac{7}{2}$ or $3\frac{1}{2}$

5) $4\frac{4}{5} \times 1\frac{9}{11}$

 $\frac{96}{11}$ or $8\frac{8}{11}$

6) $3\frac{4}{7} \times 1\frac{2}{5}$

 5

7) $2\frac{6}{8} \times 3\frac{3}{7}$

 $\frac{66}{7}$ or $9\frac{3}{7}$

8) $2\frac{1}{10} \times 1\frac{2}{7}$

 $\frac{27}{10}$ or $2\frac{7}{10}$

Multiplying Mixed Numbers and Fractions

Find the product.

1) $5\frac{3}{5} \times \frac{7}{4}$

$$\frac{49}{5} \text{ or } 9\frac{4}{5}$$

2) $\frac{1}{16} \times 1\frac{7}{9}$

$$\frac{1}{9}$$

3) $\frac{11}{24} \times 2\frac{6}{11}$

$$\frac{7}{6} \text{ or } 1\frac{1}{6}$$

4) $\frac{9}{7} \times 4\frac{2}{3}$

$$6$$

5) $2\frac{7}{16} \times \frac{14}{13}$

$$\frac{21}{8} \text{ or } 2\frac{5}{8}$$

6) $4\frac{4}{5} \times \frac{10}{16}$

$$3$$

7) $\frac{5}{19} \times 2\frac{8}{15}$

$$\frac{2}{3}$$

8) $3\frac{3}{13} \times \frac{8}{7}$

$$\frac{48}{13} \text{ or } 3\frac{9}{13}$$

Dividing Fractions

Find the quotient.

1) $\frac{6}{7} \div \frac{2}{7}$

$$\frac{3}{1}$$

2) $\frac{1}{4} \div \frac{19}{12}$

$$\frac{3}{19}$$

3) $\frac{2}{5} \div \frac{7}{9}$

$$\frac{18}{35}$$

4) $\frac{5}{3} \div \frac{3}{8}$

$$\frac{40}{9} \text{ or } 4\frac{4}{9}$$

5) $\frac{3}{4} \div \frac{9}{8}$

$$\frac{2}{3}$$

6) $\frac{12}{18} \div \frac{17}{9}$

$$\frac{6}{17}$$

7) $\frac{11}{10} \div \frac{5}{2}$

$$\frac{11}{25}$$

8) $\frac{15}{17} \div \frac{5}{3}$

$$\frac{9}{17}$$

Dividing Mixed Numbers

Find the quotient.

1) $6\frac{6}{9} \div 1\frac{5}{7}$

2) $5\frac{5}{6} \div 7\frac{1}{6}$

$$\frac{35}{9} \text{ or } 3\frac{8}{9}$$

$$\frac{35}{43}$$

3) $7\frac{4}{5} \div 8\frac{1}{8}$

4) $6\frac{1}{3} \div 1\frac{1}{18}$

$$\frac{24}{25}$$

$$6$$

5) $8\frac{3}{10} \div 4\frac{3}{20}$

6) $9\frac{3}{4} \div 5\frac{2}{5}$

$$2$$

$$\frac{65}{36} \text{ or } 1\frac{29}{36}$$

7) $3\frac{7}{12} \div 4\frac{1}{2}$

8) $2\frac{6}{14} \div 2\frac{3}{7}$

$$\frac{43}{54}$$

$$1$$



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