1. Write in standard form forty thousand, five hundred seven	**2.** Round to the nearest thousand 5,698,989
3. Simplify $70 - 10 \div 2$	**4.** Simplify $15 - 6(2 - 7)$

5. Add $593 + 948$	**6.** Subtract $6300 - 203$
7. Multiply 532×45	**8.** Divide $7833 \div 23$

9. Solve the equation $m - 53 = 26$	**10.** Solve the equation $15m = 3$
11. Write as an improper fraction $7\frac{2}{11}$	**12.** Write as a mixed number $\frac{40}{3}$

13. Multiply and simplify $-\frac{2}{5} \bullet \frac{25}{42}$	**14.** Multiply and simplify $1\frac{1}{2} \bullet 15\frac{1}{3}$
15. Divide and simplify $-\frac{6}{25} \div \left(-\frac{7}{10}\right)$	**16.** Divide and simplify $2\frac{4}{9} \div 1\frac{5}{6}$

17. Add $\frac{1}{12}+\frac{5}{12}$	**18.** Subtract $\frac{9}{13}-\frac{2}{13}$
19. Add $-\frac{3}{12}+\frac{1}{8}=$	**20.** Subtract $\frac{19}{24}-\frac{5}{6}=$

21. Add

$$7\frac{5}{9}+4\frac{1}{9}=$$

22. Subtract

$$12\frac{5}{10}-7\frac{3}{10}=$$

23. Add

$$8\frac{2}{5}+11\frac{1}{4}=$$

24. Subtract

$$10\frac{1}{7}-2\frac{11}{14}=$$

25. Write in standard form one hundred fifty-two and seven thousandths	**26.** Write as a mixed number in simplest form 9.015
27. Round to the nearest thousandth 486.53729	**28.** Round the the nearest cent $23.8775

29. Add $45.03 + 7.98 + 0.012$	**30.** Subtract $-700 + 3.08$
31. Multiply 7.04×3.2	**32.** Divide $-70.56 \div (-9.8)$

33. Write as a decimal $\frac{13}{20}$	**34.** What is 40% of \$180?
35. Write as a ratio of whole numbers using fractional notation. Write the fraction in simplest form. 450 to 500	**36.** Write as a ratio of whole numbers using fractional notation. Write the fraction in simplest form. 4.5 to 10

37. Write as a unit rate 120 calories in a 3 ounce serving	**38.** Write as a unit rate $285 for books for 4 college courses
39. Find the unknown number $\frac{n}{50} = \frac{3}{10}$	**40.** Find the unknown number $\frac{1.8}{6} = \frac{n}{0.3}$

41. Write as a ratio of two integers 8.129	**42.** Multiply and simplify $3(a + 12)$
43. Simplify $12(a + 2) - 4(2a - 1)$	**44.** To which set does the following number belong? $-\sqrt{64}$

45. Solve the equation $10m + 3 = 63$	**46.** Solve the equation $5(a - 8) = 3a$
47. Solve the equation $\frac{2}{3}(6x + 15) = -3$	**48.** Find three numbers whose sum is 78.

Reference:

Addition Table

+	1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10	11
2	3	4	5	6	7	8	9	10	11	12
3	4	5	6	7	8	9	10	11	12	13
4	5	6	7	8	9	10	11	12	13	14
5	6	7	8	9	10	11	12	13	14	15
6	7	8	9	10	11	12	13	14	15	16
7	8	9	10	11	12	13	14	15	16	17
8	9	10	11	12	13	14	15	16	17	18
9	10	11	12	13	14	15	16	17	18	19
10	11	12	13	14	15	16	17	18	19	20

Multiplication Table

×	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

Rules for Signed Numbers

Addition

Positive + Positive = Positive

POSITIVE + Negative = Positive

Positive + **NEGATIVE** = Negative

Negative + Negative = Negative

Numbers in bold, capital letters have a greater magnitude than nonbold, lower case partner number.

Subtraction

$A - B = A + (-B)$

Multiplication

Positive × Positive = Positive

Positive × Negative = Negative

Negative × Positive = Negative

Negative × Negative = Positive

Division

Positive ÷ Positive = Positive

Positive ÷ Negative = Negative

Negative ÷ Positive = Negative

Negative ÷ Negative = Positive

Rules for Fractions

For any real numbers, a, b, c, and d, $b \neq 0$, $c \neq 0$, and $d \neq 0$

$$\frac{a}{c}+\frac{b}{c}=\frac{a+b}{c} \qquad \frac{a}{c}-\frac{b}{c}=\frac{a-b}{c} \qquad \frac{a}{b}\bullet\frac{c}{d}=\frac{ac}{bd} \qquad \frac{a}{b}\div\frac{c}{d}=\frac{a}{b}\bullet\frac{d}{c}=\frac{ad}{bc}$$