

Ohio Operating Engineers Entrance Exam Tune Up

SOLUTIONS



Updated:
October 2026

Addition Solutions

1	4	2	3	3	1	4	1	5	4
+	4	+	3	+	4	+	3	+	3
	8		6		5		4		7
6	2	7	1	8	3	9	1	10	3
+	4	+	2	+	2	+	1	+	1
	6		3		5		2		4
11	5	12	4	13	1	14	1	15	6
+	6	+	4	+	5	+	4	+	5
	11		8		6		5		11
16	3	17	1	18	4	19	2	20	4
+	6	+	3	+	3	+	1	+	2
	9		4		7		3		6
21	4	22	5	23	4	24	5	25	6
+	1	+	1	+	5	+	5	+	2
	5		6		9		10		8
26	8	27	7	28	1	29	1	30	9
+	10	+	6	+	8	+	7	+	8
	18		13		9		8		17
31	5	32	7	33	7	34	8	35	7
+	9	+	4	+	3	+	2	+	8
	14		11		10		10		15
36	8	37	10	38	10	39	2	40	8
+	9	+	4	+	6	+	6	+	6
	17		14		16		8		14

41	4	42	1	43	21	44	3	45	3
+	10	+	10	+	23	+	20	+	16
	14		11		44		23		19
46	12	47	3	48	16	49	15	50	20
+	22	+	12	+	11	+	4	+	5
	34		15		27		19		25
51	5	52	21	53	10	54	2	55	16
+	14	+	15	+	24	+	25	+	21
	19		36		34		27		37
56	8	57	3	58	23	59	8	60	15
+	11	+	4	+	14	+	21	+	24
	19		7		37		29		39
61	22	62	21	63	17	64	3	65	22
+	14	+	23	+	16	+	20	+	19
	36		44		33		23		41
66	12	67	17	68	17	69	19	70	24
+	22	+	8	+	19	+	21	+	9
	34		25		36		40		33
71	25	72	2	73	49	74	42	75	8
+	16	+	25	+	55	+	37	+	47
	41		27		104		79		55
76	9	77	51	78	28	79	9	80	39
+	39	+	45	+	53	+	28	+	26
	48		96		81		37		65
81	16	82	40	83	36	84	47	85	42
+	6	+	20	+	11	+	13	+	46
	22		60		47		60		88

86	44	87	56	88	60	89	12	90	49
+	51	+	23	+	38	+	33	+	35
	95		79		98		45		84
91	23	92	7	93	122	94	103	95	116
+	56	+	60	+	137	+	92	+	17
	79		67		259		195		133
96	97	97	127	98	131	99	69	100	97
+	20	+	111	+	70	+	21	+	63
	117		238		201		90		160
101	38	102	98	103	88	104	115	105	113
+	14	+	48	+	26	+	30	+	103
	52		146		114		145		216
106	125	107	140	108	758	109	623	110	429
+	110	+	56	+	65	+	86	+	91
	235		196		823		709		520
111	209	112	565	113	753	114	632	115	824
+	42	+	124	+	154	+	281	+	716
	251		689		907		913		1,540
116	738	117	907	118	669	119	836	120	928
+	670	+	798	+	588	+	721	+	334
	1,408		1,705		1,257		1,557		1,262

For Fun

1	543	2	1,357	3	1,289,367	4	333,333,333
	432		2,468		375,154		477,777
	321		462		32,321		88,888
+	123	+	47		357		55,515
	<u>1,419</u>		<u>4,334</u>		5		54,321
				<u>1,697,204</u>		+	903
							<u>334,010,737</u>

5	543
	432
	321
	123
	1,357
	2,468
	462
	47
	1,289,367
+	<u>375,154</u>
	1,670,274
x	0.1
	<u>167,027.4</u>

Subtraction Solutions

1	$\begin{array}{r} 4 \\ - 3 \\ \hline 1 \end{array}$	2	$\begin{array}{r} 5 \\ - 4 \\ \hline 1 \end{array}$	3	$\begin{array}{r} 4 \\ - 2 \\ \hline 2 \end{array}$	4	$\begin{array}{r} 2 \\ - 1 \\ \hline 1 \end{array}$	5	$\begin{array}{r} 3 \\ - 1 \\ \hline 2 \end{array}$
6	$\begin{array}{r} 4 \\ - 1 \\ \hline 3 \end{array}$	7	$\begin{array}{r} 4 \\ - 4 \\ \hline 0 \end{array}$	8	$\begin{array}{r} 5 \\ - 2 \\ \hline 3 \end{array}$	9	$\begin{array}{r} 5 \\ - 3 \\ \hline 2 \end{array}$	10	$\begin{array}{r} 2 \\ - 2 \\ \hline 0 \end{array}$
11	$\begin{array}{r} 6 \\ - 5 \\ \hline 1 \end{array}$	12	$\begin{array}{r} 7 \\ - 6 \\ \hline 1 \end{array}$	13	$\begin{array}{r} 6 \\ - 3 \\ \hline 3 \end{array}$	14	$\begin{array}{r} 5 \\ - 1 \\ \hline 4 \end{array}$	15	$\begin{array}{r} 7 \\ - 2 \\ \hline 5 \end{array}$
16	$\begin{array}{r} 6 \\ - 6 \\ \hline 0 \end{array}$	17	$\begin{array}{r} 8 \\ - 3 \\ \hline 5 \end{array}$	18	$\begin{array}{r} 8 \\ - 5 \\ \hline 3 \end{array}$	19	$\begin{array}{r} 7 \\ - 5 \\ \hline 2 \end{array}$	20	$\begin{array}{r} 1 \\ - 1 \\ \hline 0 \end{array}$
21	$\begin{array}{r} 5 \\ - 5 \\ \hline 0 \end{array}$	22	$\begin{array}{r} 7 \\ - 4 \\ \hline 3 \end{array}$	23	$\begin{array}{r} 8 \\ - 8 \\ \hline 0 \end{array}$	24	$\begin{array}{r} 9 \\ - 8 \\ \hline 1 \end{array}$	25	$\begin{array}{r} 7 \\ - 3 \\ \hline 4 \end{array}$
26	$\begin{array}{r} 6 \\ - 2 \\ \hline 4 \end{array}$	27	$\begin{array}{r} 8 \\ - 2 \\ \hline 6 \end{array}$	28	$\begin{array}{r} 10 \\ - 4 \\ \hline 6 \end{array}$	29	$\begin{array}{r} 10 \\ - 6 \\ \hline 4 \end{array}$	30	$\begin{array}{r} 8 \\ - 6 \\ \hline 2 \end{array}$
31	$\begin{array}{r} 9 \\ - 6 \\ \hline 3 \end{array}$	32	$\begin{array}{r} 9 \\ - 5 \\ \hline 4 \end{array}$	33	$\begin{array}{r} 17 \\ - 16 \\ \hline 1 \end{array}$	34	$\begin{array}{r} 16 \\ - 11 \\ \hline 5 \end{array}$	35	$\begin{array}{r} 15 \\ - 4 \\ \hline 11 \end{array}$
36	$\begin{array}{r} 21 \\ - 11 \\ \hline 10 \end{array}$	37	$\begin{array}{r} 18 \\ - 16 \\ \hline 2 \end{array}$	38	$\begin{array}{r} 24 \\ - 12 \\ \hline 12 \end{array}$	39	$\begin{array}{r} 18 \\ - 11 \\ \hline 7 \end{array}$	40	$\begin{array}{r} 18 \\ - 12 \\ \hline 6 \end{array}$

41	15	42	24	43	19	44	17	45	22
-	11	-	14	-	17	-	4	-	12
	<u>4</u>		<u>10</u>		<u>2</u>		<u>13</u>		<u>10</u>
46	19	47	25	48	17	49	22	50	17
-	8	-	15	-	10	-	19	-	8
	<u>11</u>		<u>10</u>		<u>7</u>		<u>3</u>		<u>9</u>
51	20	52	24	53	25	54	21	55	23
-	5	-	9	-	16	-	15	-	14
	<u>15</u>		<u>15</u>		<u>9</u>		<u>6</u>		<u>9</u>
56	22	57	25	58	18	59	39	60	16
-	14	-	8	-	12	-	26	-	6
	<u>8</u>		<u>17</u>		<u>6</u>		<u>13</u>		<u>10</u>
61	40	62	36	63	47	64	56	65	49
-	20	-	11	-	13	-	23	-	35
	<u>20</u>		<u>25</u>		<u>34</u>		<u>33</u>		<u>14</u>
66	54	67	49	68	43	69	14	70	35
-	34	-	27	-	30	-	12	-	14
	<u>20</u>		<u>22</u>		<u>13</u>		<u>2</u>		<u>21</u>
71	28	72	58	73	46	74	26	75	42
-	16	-	34	-	40	-	22	-	11
	<u>12</u>		<u>24</u>		<u>6</u>		<u>4</u>		<u>31</u>
76	45	77	47	78	42	79	51	80	56
-	21	-	36	-	37	-	45	-	23
	<u>24</u>		<u>11</u>		<u>5</u>		<u>6</u>		<u>33</u>
81	60	82	52	83	43	84	60	85	57
-	38	-	33	-	39	-	21	-	28
	<u>22</u>		<u>19</u>		<u>4</u>		<u>39</u>		<u>29</u>

86	43	87	103	88	127	89	97	90	38
-	27	-	92	-	111	-	63	-	14
	16		11		16		34		24
91	98	92	88	93	115	94	140	95	149
-	48	-	26	-	30	-	56	-	93
	50		62		85		84		56
96	122	97	133	98	129	99	41	100	123
-	86	-	84	-	81	-	23	-	66
	36		49		48		18		57
101	108	102	149	103	57	104	142	105	106
-	96	-	50	-	35	-	68	-	66
	12		99		22		74		40
106	107	107	209	108	229	109	565	110	669
-	73	-	42	-	104	-	124	-	588
	34		167		125		441		81
111	836	112	624	113	632	114	753	115	928
-	721	-	385	-	281	-	154	-	334
	115		239		351		599		594
116	991	117	799						
-	598	-	549						
	393		250						

Multiplication Table

x	0	1	2	3	4	5	6	7	8	9	10	11
0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11
2	0	2	4	6	8	10	12	14	16	18	20	22
3	0	3	6	9	12	15	18	21	24	27	30	33
4	0	4	8	12	16	20	24	28	32	36	40	44
5	0	5	10	15	20	25	30	35	40	45	50	55
6	0	6	12	18	24	30	36	42	48	54	60	66
7	0	7	14	21	28	35	42	49	56	63	70	77
8	0	8	16	24	32	40	48	56	64	72	80	88
9	0	9	18	27	36	45	54	63	72	81	90	99
10	0	10	20	30	40	50	60	70	80	90	100	110
11	0	11	22	33	44	55	66	77	88	99	110	121

 : Denotes The "Square" of the number, the Number multiplied by

Multiplication Solutions

1	4	2	3	3	1	4	1	5	4
x	4	x	3	x	4	x	3	x	3
	16		9		4		3		12
6	2	7	1	8	3	9	1	10	3
x	4	x	2	x	2	x	1	x	1
	8		2		6		1		3
11	4	12	3	13	4	14	2	15	3
x	1	x	4	x	2	x	2	x	3
	4		12		8		4		9
16	2	17	4	18	1	19	2	20	3
x	3	x	4	x	2	x	1	x	2
	6		16		2		2		6
21	5	22	5	23	2	24	6	25	4
x	6	x	4	x	5	x	5	x	6
	30		20		10		30		24
26	5	27	5	28	5	29	6	30	6
x	3	x	2	x	5	x	3	x	4
	15		10		25		18		24
31	3	32	2	33	6	34	7	35	2
x	6	x	6	x	6	x	7	x	8
	18		12		36		49		16
36	2	37	9	38	5	39	7	40	7
x	7	x	8	x	9	x	5	x	4
	14		72		45		35		28

41	7	42	8	43	7	44	8	45	9
x	3	x	3	x	8	x	9	x	6
	<u>21</u>		<u>24</u>		<u>56</u>		<u>72</u>		<u>54</u>

46	9	47	10	48	10	49	10	50	11
x	10	x	4	x	7	x	11	x	9
	<u>90</u>		<u>40</u>		<u>70</u>		<u>10</u>		<u>99</u>
							100		
							<u>110</u>		

51	6	52	10	53	9	54	9	55	12
x	11	x	3	x	10	x	11	x	5
	<u>66</u>		<u>30</u>		<u>90</u>		<u>99</u>		<u>60</u>

56	12	57	5	58	13	59	11	60	13
x	8	x	12	x	15	x	10	x	12
	<u>96</u>		<u>60</u>		<u>65</u>		<u>00</u>		<u>26</u>
					130		110		130
					<u>195</u>		<u>110</u>		<u>156</u>

61	8	62	11	63	11	64	15	65	15
x	14	x	7	x	12	x	7	x	10
	<u>112</u>		<u>77</u>		<u>22</u>		<u>105</u>		<u>00</u>
					110				150
					<u>132</u>				<u>150</u>

66	14	67	17	68	15	69	6	70	18
x	11	x	19	x	14	x	17	x	16
	<u>14</u>		<u>153</u>		<u>60</u>		<u>102</u>		<u>108</u>
	140		170		150				180
	<u>154</u>		<u>323</u>		<u>210</u>				<u>288</u>

71	12	72	15	73	14	74	17	75	16
x	18	x	11	x	7	x	8	x	17
	96		15		98		136		112
	120		110						160
	216		165						272
76	20	77	11	78	21	79	26	80	23
x	14	x	19	x	17	x	28	x	21
	80		99		147		208		23
	200		110		210		520		460
	280		209		357		728		483
81	9	82	27	83	17	84	22	85	25
x	25	x	24	x	27	x	16	x	11
	225		108		119		132		25
			540		340		220		250
			648		459		352		275
86	23	87	24	88	29	89	30	90	26
x	24	x	26	x	15	x	21	x	20
	92		144		145		30		00
	460		480		290		600		520
	552		624		435		630		520
91	92	92	71	93	17	94	18	95	86
x	92	x	63	x	79	x	67	x	75
	184		213		153		126		430
	8,280		4,260		1,190		1,080		6,020
	8,464		4,473		1,343		1,206		6,450
96	50	97	19	98	67	99	61	100	78
x	88	x	49	x	45	x	22	x	25
	400		171		335		122		390
	4,000		760		2,680		1,220		1,560
	4,400		931		3,015		1,342		1,950

101	71	102	75	103	94	104	100	105	101
x	<u>77</u>	x	<u>85</u>	x	<u>91</u>	x	<u>64</u>	x	<u>37</u>
	497		375		94		400		707
	4,970		6,000		8,460		6,000		3,030
	5,467		6,375		8,554		6,400		3,737
106	105	107	137	108	159				
x	<u>99</u>	x	<u>72</u>	x	<u>104</u>				
	945		274		636				
	9,450		9,590		0000				
	10,395		9,864		15,900				
					16,536				

Division Solutions

1.
$$\begin{array}{r} 4 \overline{) 16} \\ \underline{16} \\ 0 \end{array}$$

2.
$$\begin{array}{r} 3 \overline{) 9} \\ \underline{9} \\ 0 \end{array}$$

3.
$$\begin{array}{r} 4 \overline{) 16} \\ \underline{16} \\ 0 \end{array}$$

4.
$$\begin{array}{r} 3 \overline{) 9} \\ \underline{9} \\ 0 \end{array}$$

5.
$$\begin{array}{r} 3 \overline{) 12} \\ \underline{12} \\ 0 \end{array}$$

6.
$$\begin{array}{r} 4 \overline{) 8} \\ \underline{8} \\ 0 \end{array}$$

7.
$$\begin{array}{r} 2 \overline{) 4} \\ \underline{4} \\ 0 \end{array}$$

8.
$$\begin{array}{r} 2 \overline{) 6} \\ \underline{6} \\ 0 \end{array}$$

9.
$$\begin{array}{r} 1 \overline{) 1} \\ \underline{1} \\ 0 \end{array}$$

10.
$$\begin{array}{r} 1 \overline{) 3} \\ \underline{3} \\ 0 \end{array}$$

11.
$$\begin{array}{r} 1 \overline{) 4} \\ \underline{4} \\ 0 \end{array}$$

12.
$$\begin{array}{r} 04 \overline{) 12} \\ \underline{12} \\ 0 \end{array}$$

13.
$$\begin{array}{r} 2 \overline{) 8} \\ \underline{8} \\ 0 \end{array}$$

14.
$$\begin{array}{r} 2 \overline{) 4} \\ \underline{4} \\ 0 \end{array}$$

15.
$$\begin{array}{r} 3 \overline{) 9} \\ \underline{9} \\ 0 \end{array}$$

16.
$$\begin{array}{r} 06 \overline{) 30} \\ \underline{30} \\ 0 \end{array}$$

17.
$$\begin{array}{r} 08 \overline{) 16} \\ \underline{16} \\ 0 \end{array}$$

18.
$$\begin{array}{r} 5 \overline{) 25} \\ \underline{25} \\ 0 \end{array}$$

19.
$$\begin{array}{r} 4 \overline{) 16} \\ \underline{16} \\ 0 \end{array}$$

20.
$$\begin{array}{r} 05 \overline{) 30} \\ \underline{30} \\ 0 \end{array}$$

21.
$$\begin{array}{r} 06 \overline{) 18} \\ \underline{18} \\ 0 \end{array}$$

22.
$$\begin{array}{r} 1 \overline{) 2} \\ \underline{2} \\ 0 \end{array}$$

23.
$$\begin{array}{r} 05 \overline{) 20} \\ \underline{20} \\ 0 \end{array}$$

24.
$$\begin{array}{r} 05 \overline{) 25} \\ \underline{25} \\ 0 \end{array}$$

25.
$$\begin{array}{r} 02 \overline{) 12} \\ \underline{12} \\ 0 \end{array}$$

$$\begin{array}{r} \text{26.} \quad 6 \overline{) 04} \\ \underline{0} \\ 24 \\ \underline{24} \\ 0 \end{array}$$

$$\begin{array}{r} \text{27.} \quad 5 \overline{) 04} \\ \underline{0} \\ 20 \\ \underline{20} \\ 0 \end{array}$$

$$\begin{array}{r} \text{28.} \quad 2 \overline{) 3} \\ \underline{0} \\ 6 \\ \underline{6} \\ 0 \end{array}$$

$$\begin{array}{r} \text{29.} \quad 8 \overline{) 10} \\ \underline{8} \\ 00 \\ \underline{00} \\ 0 \end{array}$$

$$\begin{array}{r} \text{30.} \quad 7 \overline{) 06} \\ \underline{0} \\ 42 \\ \underline{42} \\ 0 \end{array}$$

$$\begin{array}{r} \text{31.} \quad 9 \overline{) 08} \\ \underline{0} \\ 72 \\ \underline{72} \\ 0 \end{array}$$

$$\begin{array}{r} \text{32.} \quad 5 \overline{) 09} \\ \underline{0} \\ 45 \\ \underline{45} \\ 0 \end{array}$$

$$\begin{array}{r} \text{33.} \quad 7 \overline{) 04} \\ \underline{0} \\ 28 \\ \underline{28} \\ 0 \end{array}$$

$$\begin{array}{r} \text{34.} \quad 7 \overline{) 03} \\ \underline{0} \\ 21 \\ \underline{21} \\ 0 \end{array}$$

$$\begin{array}{r} \text{35.} \quad 8 \overline{) 02} \\ \underline{0} \\ 16 \\ \underline{16} \\ 0 \end{array}$$

$$\begin{array}{r} \text{36.} \quad 7 \overline{) 08} \\ \underline{0} \\ 56 \\ \underline{56} \\ 0 \end{array}$$

$$\begin{array}{r} \text{37.} \quad 8 \overline{) 09} \\ \underline{0} \\ 72 \\ \underline{72} \\ 0 \end{array}$$

$$\begin{array}{r} \text{38.} \quad 10 \overline{) 04} \\ \underline{0} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

$$\begin{array}{r} \text{39.} \quad 15 \overline{) 04} \\ \underline{0} \\ 60 \\ \underline{60} \\ 0 \end{array}$$

$$\begin{array}{r} \text{40.} \quad 8 \overline{) 06} \\ \underline{0} \\ 48 \\ \underline{48} \\ 0 \end{array}$$

$$\begin{array}{r} \text{41.} \quad 4 \overline{) 10} \\ \underline{4} \\ 00 \\ \underline{00} \\ 0 \end{array}$$

$$\begin{array}{r} \text{42.} \quad 2 \overline{) 05} \\ \underline{0} \\ 10 \\ \underline{10} \\ 0 \end{array}$$

$$\begin{array}{r} \text{43.} \quad 13 \overline{) 014} \\ \underline{0} \\ 18 \\ \underline{13} \\ 52 \\ \underline{52} \\ 0 \end{array}$$

$$\begin{array}{r} \text{44.} \quad 11 \overline{) 010} \\ \underline{0} \\ 11 \\ \underline{11} \\ 00 \\ \underline{00} \\ 0 \end{array}$$

$$\begin{array}{r} \text{45.} \quad 2 \overline{) 12} \\ \underline{2} \\ 04 \\ \underline{04} \\ 0 \end{array}$$

$$\begin{array}{r}
 46. \quad 3 \overline{) \begin{array}{c} 10 \\ 30 \\ 3 \\ 00 \\ 0 \\ 0 \end{array}} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 47. \quad 13 \overline{) \begin{array}{c} 012 \\ 156 \\ 0 \\ 15 \\ 13 \\ 26 \\ 26 \\ 0 \end{array}} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 48. \quad 7 \overline{) \begin{array}{c} 14 \\ 98 \\ 7 \\ 28 \\ 28 \\ 0 \end{array}} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 49. \quad 3 \overline{) \begin{array}{c} 07 \\ 21 \\ 0 \\ 21 \\ 21 \\ 0 \end{array}} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 50. \quad 10 \overline{) \begin{array}{c} 07 \\ 70 \\ 0 \\ 70 \\ 70 \\ 0 \end{array}} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 51. \quad 9 \overline{) \begin{array}{c} 03 \\ 27 \\ 0 \\ 27 \\ 27 \\ 0 \end{array}} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 52. \quad 12 \overline{) \begin{array}{c} 04 \\ 48 \\ 0 \\ 48 \\ 48 \\ 0 \end{array}} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 53. \quad 11 \overline{) \begin{array}{c} 012 \\ 132 \\ 0 \\ 13 \\ 11 \\ 22 \\ 22 \\ 0 \end{array}} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 54. \quad 11 \overline{) \begin{array}{c} 013 \\ 143 \\ 0 \\ 14 \\ 11 \\ 33 \\ 33 \\ 0 \end{array}} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 55. \quad 14 \overline{) \begin{array}{c} 06 \\ 84 \\ 0 \\ 84 \\ 84 \\ 0 \end{array}} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 56. \quad 15 \overline{) \begin{array}{c} 010 \\ 150 \\ 0 \\ 15 \\ 15 \\ 00 \\ 00 \\ 0 \end{array}} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 57. \quad 3 \overline{) \begin{array}{c} 09 \\ 27 \\ 0 \\ 27 \\ 27 \\ 0 \end{array}} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 58. \quad 13 \overline{) \begin{array}{c} 009 \\ 117 \\ 0 \\ 11 \\ 00 \\ 117 \\ 117 \\ 0 \end{array}} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 59. \quad 6 \overline{) \begin{array}{c} 14 \\ 84 \\ 6 \\ 24 \\ 24 \\ 0 \end{array}} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 60. \quad 2 \overline{) \begin{array}{c} 15 \\ 30 \\ 2 \\ 10 \\ 10 \\ 0 \end{array}} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 \text{61.} \quad 21 \overline{) 483} \\
 \underline{0} \\
 48 \\
 \underline{42} \\
 63 \\
 \underline{63} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{62.} \quad 18 \overline{) 288} \\
 \underline{0} \\
 28 \\
 \underline{18} \\
 108 \\
 \underline{108} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{63.} \quad 4 \overline{) 80} \\
 \underline{8} \\
 00 \\
 \underline{0} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{64.} \quad 4 \overline{) 68} \\
 \underline{4} \\
 28 \\
 \underline{28} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{65.} \quad 22 \overline{) 418} \\
 \underline{0} \\
 41 \\
 \underline{22} \\
 198 \\
 \underline{198} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{66.} \quad 12 \overline{) 264} \\
 \underline{0} \\
 26 \\
 \underline{24} \\
 24 \\
 \underline{24} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{67.} \quad 4 \overline{) 48} \\
 \underline{4} \\
 08 \\
 \underline{8} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{68.} \quad 17 \overline{) 187} \\
 \underline{0} \\
 18 \\
 \underline{17} \\
 17 \\
 \underline{17} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{69.} \quad 17 \overline{) 153} \\
 \underline{0} \\
 15 \\
 \underline{00} \\
 153 \\
 \underline{153} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{70.} \quad 15 \overline{) 75} \\
 \underline{0} \\
 75 \\
 \underline{75} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{71.} \quad 20 \overline{) 120} \\
 \underline{0} \\
 12 \\
 \underline{00} \\
 120 \\
 \underline{120} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{72.} \quad 18 \overline{) 342} \\
 \underline{0} \\
 34 \\
 \underline{18} \\
 162 \\
 \underline{162} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{73.} \quad 19 \overline{) 399} \\
 \underline{0} \\
 39 \\
 \underline{38} \\
 19 \\
 \underline{19} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{74.} \quad 24 \overline{) 240} \\
 \underline{0} \\
 24 \\
 \underline{24} \\
 000 \\
 \underline{0} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{75.} \quad 25 \overline{) 400} \\
 \underline{0} \\
 40 \\
 \underline{25} \\
 150 \\
 \underline{150} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{76.} \quad 21 \overline{) 315} \\
 \underline{0} \\
 31 \\
 \underline{21} \\
 105 \\
 \underline{105} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{77.} \quad 10 \overline{) 240} \\
 \underline{0} \\
 24 \\
 \underline{20} \\
 40 \\
 \underline{40} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{78.} \quad 3 \overline{) 75} \\
 \underline{6} \\
 15 \\
 \underline{15} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{79.} \quad 25 \overline{) 700} \\
 \underline{0} \\
 70 \\
 \underline{50} \\
 200 \\
 \underline{200} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{80.} \quad 22 \overline{) 440} \\
 \underline{0} \\
 44 \\
 \underline{44} \\
 00 \\
 \underline{00} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{81.} \quad 6 \overline{) 144} \\
 \underline{0} \\
 14 \\
 \underline{12} \\
 24 \\
 \underline{24} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{82.} \quad 7 \overline{) 147} \\
 \underline{0} \\
 14 \\
 \underline{14} \\
 07 \\
 \underline{7} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{83.} \quad 26 \overline{) 598} \\
 \underline{0} \\
 59 \\
 \underline{52} \\
 78 \\
 \underline{78} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{84.} \quad 16 \overline{) 432} \\
 \underline{0} \\
 43 \\
 \underline{32} \\
 112 \\
 \underline{112} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{85.} \quad 7 \overline{) 112} \\
 \underline{0} \\
 11 \\
 \underline{7} \\
 42 \\
 \underline{42} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{86.} \quad 21 \overline{) 294} \\
 \underline{0} \\
 29 \\
 \underline{21} \\
 84 \\
 \underline{84} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{87.} \quad 21 \overline{) 252} \\
 \underline{0} \\
 25 \\
 \underline{21} \\
 42 \\
 \underline{42} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{88.} \quad 19 \overline{) 133} \\
 \underline{0} \\
 13 \\
 \underline{00} \\
 133 \\
 \underline{133} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{89.} \quad 24 \overline{) 192} \\
 \underline{0} \\
 19 \\
 \underline{00} \\
 192 \\
 \underline{192} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{90.} \quad 22 \overline{) 528} \\
 \underline{0} \\
 52 \\
 \underline{44} \\
 88 \\
 \underline{88} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{91.} \quad 23 \overline{) 026} \\
 \underline{0} \\
 59 \\
 \underline{46} \\
 138 \\
 \underline{138} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{92.} \quad 29 \overline{) 013} \\
 \underline{0} \\
 37 \\
 \underline{29} \\
 87 \\
 \underline{87} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{93.} \quad 30 \overline{) 020} \\
 \underline{0} \\
 60 \\
 \underline{60} \\
 000 \\
 \underline{000} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{94.} \quad 8 \overline{) 018} \\
 \underline{0} \\
 14 \\
 \underline{8} \\
 64 \\
 \underline{64} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{95.} \quad 25 \overline{) 019} \\
 \underline{0} \\
 47 \\
 \underline{25} \\
 225 \\
 \underline{225} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{96.} \quad 13 \overline{) 029} \\
 \underline{0} \\
 37 \\
 \underline{26} \\
 117 \\
 \underline{117} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{97.} \quad 29 \overline{) 027} \\
 \underline{0} \\
 78 \\
 \underline{58} \\
 203 \\
 \underline{203} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{98.} \quad 9 \overline{) 032} \\
 \underline{0} \\
 28 \\
 \underline{27} \\
 18 \\
 \underline{18} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{99.} \quad 10 \overline{) 028} \\
 \underline{0} \\
 28 \\
 \underline{20} \\
 80 \\
 \underline{80} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{100.} \quad 22 \overline{) 036} \\
 \underline{0} \\
 79 \\
 \underline{66} \\
 132 \\
 \underline{132} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{101.} \quad 10 \overline{) 021} \\
 \underline{0} \\
 21 \\
 \underline{20} \\
 10 \\
 \underline{10} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{102.} \quad 28 \overline{) 020} \\
 \underline{0} \\
 56 \\
 \underline{56} \\
 00 \\
 \underline{00} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{103.} \quad 14 \overline{) 009} \\
 \underline{0} \\
 12 \\
 \underline{00} \\
 126 \\
 \underline{126} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{104.} \quad 28 \overline{) 017} \\
 \underline{0} \\
 47 \\
 \underline{28} \\
 196 \\
 \underline{196} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{105.} \quad 29 \overline{) 032} \\
 \underline{0} \\
 92 \\
 \underline{87} \\
 058 \\
 \underline{058} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{107.} \quad 34 \overline{) 0037} \\
 \underline{0} \\
 12 \\
 \underline{00} \\
 125 \\
 \underline{102} \\
 238 \\
 \underline{238} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{108.} \quad 35 \overline{) 0031} \\
 \underline{0} \\
 10 \\
 \underline{00} \\
 108 \\
 \underline{105} \\
 0035 \\
 \underline{35} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{109.} \quad 31 \overline{) 0035} \\
 \underline{0} \\
 10 \\
 \underline{00} \\
 108 \\
 \underline{93} \\
 155 \\
 \underline{155} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{110.} \quad 40 \overline{) 0027} \\
 \underline{0} \\
 10 \\
 \underline{00} \\
 108 \\
 \underline{80} \\
 280 \\
 \underline{280} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{111.} \quad 19 \overline{) 038} \\
 \underline{0} \\
 72 \\
 \underline{57} \\
 152 \\
 \underline{152} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{112.} \quad 73 \overline{) 0075} \\
 \underline{0} \\
 54 \\
 \underline{00} \\
 547 \\
 \underline{511} \\
 365 \\
 \underline{365} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{113.} \quad 35 \overline{) 0034} \\
 \underline{0} \\
 11 \\
 \underline{00} \\
 119 \\
 \underline{105} \\
 140 \\
 \underline{140} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{114.} \quad 25 \overline{) 0047} \\
 \underline{0} \\
 11 \\
 \underline{00} \\
 117 \\
 \underline{100} \\
 175 \\
 \underline{175} \\
 0
 \end{array}$$

$$\begin{array}{r}
 \text{115.} \quad 70 \overline{) 0072} \\
 \underline{0} \\
 50 \\
 \underline{00} \\
 504 \\
 \underline{490} \\
 140 \\
 \underline{140} \\
 0
 \end{array}$$

Decimal +/- Solutions

$$\begin{array}{r} 1 \quad 8.0 \\ + 9.0 \\ \hline 17.0 \end{array}$$

$$\begin{array}{r} 2 \quad 0.2 \\ + 8.0 \\ \hline 8.2 \end{array}$$

$$\begin{array}{r} 3 \quad 0.8 \\ + 7.0 \\ \hline 7.8 \end{array}$$

$$\begin{array}{r} 4 \quad 2.0 \\ + 0.5 \\ \hline 2.5 \end{array}$$

$$\begin{array}{r} 5 \quad 3.0 \\ + 0.2 \\ \hline 3.2 \end{array}$$

$$\begin{array}{r} 6 \quad 6.0 \\ + 0.2 \\ \hline 6.2 \end{array}$$

$$\begin{array}{r} 7 \quad 7.0 \\ + 7.0 \\ \hline 14.0 \end{array}$$

$$\begin{array}{r} 8 \quad 9.0 \\ + 9.0 \\ \hline 18.0 \end{array}$$

$$\begin{array}{r} 9 \quad 3.0 \\ + 6.0 \\ \hline 9.0 \end{array}$$

$$\begin{array}{r} 10 \quad 9.2 \\ + 0.9 \\ \hline 10.1 \end{array}$$

$$\begin{array}{r} 11 \quad 0.8 \\ + 0.9 \\ \hline 1.7 \end{array}$$

$$\begin{array}{r} 12 \quad 0.5 \\ - 0.3 \\ \hline 0.2 \end{array}$$

$$\begin{array}{r} 13 \quad 0.7 \\ - 0.2 \\ \hline 0.5 \end{array}$$

$$\begin{array}{r} 14 \quad 1.3 \\ - 0.9 \\ \hline 0.4 \end{array}$$

$$\begin{array}{r} 15 \quad 0.7 \\ - 0.4 \\ \hline 0.3 \end{array}$$

$$\begin{array}{r} 16 \quad 8.0 \\ - 6.2 \\ \hline 1.8 \end{array}$$

$$\begin{array}{r} 17 \quad 9.2 \\ - 2.7 \\ \hline 6.5 \end{array}$$

$$\begin{array}{r} 18 \quad 10.0 \\ - 5.05 \\ \hline 4.95 \end{array}$$

$$\begin{array}{r} 19 \quad 8.10 \\ + 9.10 \\ \hline 17.20 \end{array}$$

$$\begin{array}{r} 20 \quad 0.15 \\ + 7.80 \\ \hline 7.95 \end{array}$$

$$\begin{array}{r} 21 \quad 0.85 \\ + 7.40 \\ \hline 8.25 \end{array}$$

$$\begin{array}{r} 22 \quad 1.8 \\ + 0.48 \\ \hline 2.28 \end{array}$$

$$\begin{array}{r} 23 \quad 2.8 \\ + 0.13 \\ \hline 2.93 \end{array}$$

$$\begin{array}{r} 24 \quad 7.00 \\ + 7.60 \\ \hline 14.60 \end{array}$$

$$\begin{array}{r} 25 \quad 0.55 \\ + 0.61 \\ \hline 1.16 \end{array}$$

$$\begin{array}{r} 26 \quad 1.80 \\ - 0.48 \\ \hline 1.32 \end{array}$$

$$\begin{array}{r} 27 \quad 2.80 \\ - 0.13 \\ \hline 2.67 \end{array}$$

$$\begin{array}{r} 28 \quad 6.00 \\ - 0.21 \\ \hline 5.79 \end{array}$$

$$\begin{array}{r} 29 \quad 9.30 \\ - 4.00 \\ \hline 5.30 \end{array}$$

$$\begin{array}{r} 30 \quad 7.20 \\ - 0.65 \\ \hline 6.55 \end{array}$$

$$\begin{array}{r} 31 \quad 7.20 \\ - 4.60 \\ \hline 2.60 \end{array}$$

$$\begin{array}{r} 32 \quad 6.81 \\ - 0.91 \\ \hline 5.90 \end{array}$$

$$\begin{array}{r} 33 \quad 5.80 \\ - 0.76 \\ \hline 5.04 \end{array}$$

$$\begin{array}{r} 34 \quad 0.60 \\ - 0.45 \\ \hline 0.15 \end{array}$$

$$\begin{array}{r} 35 \quad 0.76 \\ - 0.68 \\ \hline 0.08 \end{array}$$

$$\begin{array}{r} 36 \quad 9.70 \\ - 5.9 \\ \hline 3.80 \end{array}$$

$$\begin{array}{r} 37 \quad 8.50 \\ - 0.95 \\ \hline 7.55 \end{array}$$

$$\begin{array}{r} 38 \quad 0.810 \\ + 0.910 \\ \hline 1.720 \end{array}$$

$$\begin{array}{r} 39 \quad 0.015 \\ + 0.780 \\ \hline 0.795 \end{array}$$

$$\begin{array}{r} 40 \quad .280 \\ + .013 \\ \hline .293 \end{array}$$

41	$\begin{array}{r} 6.0 \\ + 0.021 \\ \hline 6.021 \end{array}$	42	$\begin{array}{r} 1.500 \\ + .18 \\ \hline 1.680 \end{array}$	43	$\begin{array}{r} 1.500 \\ - 0.180 \\ \hline 1.320 \end{array}$	44	$\begin{array}{r} 7.2 \\ - .0655 \\ \hline 7.1345 \end{array}$	45	$\begin{array}{r} .580 \\ - 0.076 \\ \hline 0.504 \end{array}$
46	$\begin{array}{r} 6.800 \\ - 0.910 \\ \hline 5.890 \end{array}$	47	$\begin{array}{r} 0.320 \\ - .170 \\ \hline 0.150 \end{array}$	48	$\begin{array}{r} 7.542 \\ - 6.753 \\ \hline 0.789 \end{array}$	49	0.6	50	1
51	0.12	52	0.003	53	3.49	54	594.236	55	.717

Decimal x and / Solutions

1 $\begin{array}{r} 0.9 \\ \times 8 \\ \hline 7.2 \end{array}$	2 $\begin{array}{r} 0.2 \\ \times 6 \\ \hline 1.2 \end{array}$	3 $\begin{array}{r} 0.60 \\ \times 2 \\ \hline 1.20 \end{array}$	4 $\begin{array}{r} 0.5 \\ \times 7 \\ \hline 3.5 \end{array}$	5 $\begin{array}{r} 0.5 \\ \times 2 \\ \hline 1.0 \end{array}$
6 $\begin{array}{r} 0.5 \\ \times 3 \\ \hline 1.5 \end{array}$	7 $\begin{array}{r} 0.4 \\ \times 7 \\ \hline 2.8 \end{array}$	8 $\begin{array}{r} 0.2 \\ \times 8 \\ \hline 1.6 \end{array}$	9 $\begin{array}{r} 0.7 \\ \times 7 \\ \hline 4.9 \end{array}$	10 $\begin{array}{r} 0.8 \\ \times 9 \\ \hline 7.2 \end{array}$
11 $\begin{array}{r} 0.9 \\ \times 6 \\ \hline 5.4 \end{array}$	12 $\begin{array}{r} 0.8 \\ \times 6 \\ \hline 4.8 \end{array}$	13 $\begin{array}{r} 9.1 \\ \times 81 \\ \hline 91 \\ 7280 \\ \hline 737.1 \end{array}$	14 $\begin{array}{r} 1.5 \\ \times 62 \\ \hline 30 \\ 900 \\ \hline 93.0 \end{array}$	15 $\begin{array}{r} 6.6 \\ \times 17 \\ \hline 462 \\ 660 \\ \hline 112.2 \end{array}$
16 $\begin{array}{r} 4.9 \\ \times 74 \\ \hline 196 \\ 3430 \\ \hline 362.6 \end{array}$	17 $\begin{array}{r} 4.8 \\ \times 18 \\ \hline 384 \\ 480 \\ \hline 86.4 \end{array}$	18 $\begin{array}{r} 4.4 \\ \times 18 \\ \hline 352 \\ 440 \\ \hline 79.2 \end{array}$	19 $\begin{array}{r} 3.5 \\ \times 66 \\ \hline 210 \\ 2100 \\ \hline 231.0 \end{array}$	20 $\begin{array}{r} 2.1 \\ \times 77 \\ \hline 147 \\ 1470 \\ \hline 161.7 \end{array}$
21 $\begin{array}{r} 8.1 \\ \times 56 \\ \hline 486 \\ 4050 \\ \hline 453.6 \end{array}$	22 $\begin{array}{r} 4.1 \\ \times 93 \\ \hline 123 \\ 3690 \\ \hline 381.3 \end{array}$	23 $\begin{array}{r} 6.3 \\ \times 99 \\ \hline 567 \\ 5670 \\ \hline 623.7 \end{array}$	24 $\begin{array}{r} 8.9 \\ \times 18 \\ \hline 712 \\ 890 \\ \hline 160.2 \end{array}$	25 $\begin{array}{r} 8.5 \\ \times 35 \\ \hline 425 \\ 2550 \\ \hline 297.5 \end{array}$
26 $\begin{array}{r} 8.6 \\ \times 95 \\ \hline 430 \\ 7740 \\ \hline 817.0 \end{array}$	27 $\begin{array}{r} 2.7 \\ \times 74 \\ \hline 108 \\ 1890 \\ \hline 199.8 \end{array}$	28 $\begin{array}{r} 0.99 \\ \times 63 \\ \hline 297 \\ 5940 \\ \hline 62.37 \end{array}$	29 $\begin{array}{r} 5.6 \\ \times 8.1 \\ \hline 56 \\ 4480 \\ \hline 45.36 \end{array}$	30 $\begin{array}{r} 0.35 \\ \times 45 \\ \hline 175 \\ 1400 \\ \hline 15.75 \end{array}$

Decimals Division Solutions

1. $8 \overline{) 0.92}$

2. $6 \overline{) 0.2}$

3. $2 \overline{) 0.6}$

4. $7 \overline{) 0.5}$

5. $2 \overline{) 0.50}$

6.
$$\begin{array}{r} 03. \\ 5 \overline{) 15.} \\ \underline{0} \\ 15 \\ \underline{15} \\ 0 \end{array}$$

7. $7 \overline{) 0.4}$

8. $2 \overline{) 08.}$

0

1 6

1 6

1 6

0

9. $7 \overline{) 0.79}$

10. $81 \overline{) 009.1}$

$\underline{0}$

$7 \ 3$

$\underline{0 \ 0}$

$7 \ 3 \ 7$

$\underline{7 \ 2 \ 9}$

$8 1$

$8 1$

0

11. $62 \overline{) 93.000}$

12.
$$\begin{array}{r} 006.\bar{6} \\ 17 \overline{)112.2} \\ \underline{0} \\ 11 \\ 00 \\ 112 \\ 102 \\ 102 \\ 2 \\ 102 \\ 0 \end{array}$$

13. $74 \overline{) 004.9}$

$\underline{0}$

36

$\underline{00}$

362

$\underline{296}$

666

$\underline{666}$

0

14. $18 \overline{) 186.4}$

15.
$$\begin{array}{r} 0077. \\ 21 \overline{) 1617.} \\ \underline{0} \\ 16 \\ \underline{00} \\ 161 \\ \underline{147} \\ 147 \\ \underline{147} \\ 0 \end{array}$$

$$\begin{array}{r}
 16. \quad 41 \overline{) 3813.} \\
 \underline{0} \\
 38 \\
 \underline{00} \\
 381 \\
 \underline{369} \\
 123 \\
 \underline{123} \\
 0
 \end{array}$$

$$\begin{array}{r}
 17. \quad 35 \overline{) 1575.} \\
 \underline{0} \\
 15 \\
 \underline{00} \\
 157 \\
 \underline{140} \\
 175 \\
 \underline{175} \\
 0
 \end{array}$$

$$\begin{array}{r}
 18. \quad 18 \overline{) 160.2} \\
 \underline{0} \\
 16 \\
 \underline{00} \\
 160 \\
 \underline{144} \\
 162 \\
 \underline{162} \\
 0
 \end{array}$$

$$\begin{array}{r}
 19. \quad 95 \overline{) 817.} \\
 \underline{0} \\
 81 \\
 \underline{00} \\
 817 \\
 \underline{760} \\
 570 \\
 \underline{570} \\
 0
 \end{array}$$

$$\begin{array}{r}
 20. \quad 19 \overline{) 1121.} \\
 \underline{0} \\
 11 \\
 \underline{00} \\
 112 \\
 \underline{95} \\
 171 \\
 \underline{171} \\
 0
 \end{array}$$

$$\begin{array}{r}
 21. \quad 74 \overline{) 1998.} \\
 \underline{0} \\
 19 \\
 \underline{00} \\
 199 \\
 \underline{148} \\
 518 \\
 \underline{518} \\
 0
 \end{array}$$

$$\begin{array}{r}
 22. \quad 81 \overline{) 737.1} \\
 \underline{0} \\
 73 \\
 \underline{00} \\
 737 \\
 \underline{729} \\
 81 \\
 \underline{81} \\
 0
 \end{array}$$

$$\begin{array}{r}
 23. \quad 62 \overline{) 9.30} \\
 \underline{0} \\
 93 \\
 \underline{62} \\
 310 \\
 \underline{310} \\
 0
 \end{array}$$

$$\begin{array}{r}
 24. \quad 17 \overline{) 11.22} \\
 \underline{0} \\
 11 \\
 \underline{00} \\
 112 \\
 \underline{102} \\
 102 \\
 \underline{102} \\
 0
 \end{array}$$

$$\begin{array}{r}
 25. \quad 74 \overline{) 36.26} \\
 \underline{0} \\
 36 \\
 \underline{00} \\
 362 \\
 \underline{296} \\
 666 \\
 \underline{666} \\
 0
 \end{array}$$

26. $56 \overline{) 010.064}$

$$\begin{array}{r}
 0 \\
 \underline{56} \\
 56 \\
 \underline{56} \\
 03 \\
 \underline{0} \\
 36 \\
 \underline{00} \\
 360 \\
 \underline{336} \\
 240 \\
 \underline{224} \\
 16
 \end{array}$$

27. $35 \overline{) 0045.}$

$$\begin{array}{r}
 0 \\
 \underline{15} \\
 00 \\
 \underline{157} \\
 140 \\
 \underline{175} \\
 175 \\
 \underline{}
 \end{array}$$

28. $818 \overline{) 00091.6}$

$$\begin{array}{r}
 0 \\
 \underline{74} \\
 00 \\
 \underline{749} \\
 000 \\
 \underline{7492} \\
 7362 \\
 \underline{1308} \\
 818 \\
 \underline{4908} \\
 4908 \\
 \underline{}
 \end{array}$$

29. $179 \overline{) 0006.6}$

$$\begin{array}{r}
 0 \\
 \underline{11} \\
 00 \\
 \underline{118} \\
 000 \\
 \underline{1181} \\
 1074 \\
 \underline{107} \quad 4 \\
 0
 \end{array}$$

30. $183 \overline{) 0048.7}$

$$\begin{array}{r}
 0 \\
 \underline{89} \\
 00 \\
 \underline{891} \\
 732 \\
 \underline{1592} \\
 1464 \\
 \underline{128} \quad 1 \\
 128 \quad 1 \\
 \underline{} \quad 0
 \end{array}$$

31. $81 \overline{) 00.91}$

$$\begin{array}{r}
 0 \\
 \underline{73} \\
 00 \\
 \underline{73} \quad 7 \\
 729 \\
 \underline{72} \quad 9 \\
 81 \\
 \underline{81} \\
 0
 \end{array}$$

32. $62 \overline{) .015}$

$$\begin{array}{r}
 0 \\
 \underline{93} \\
 62 \\
 \underline{310} \\
 310 \\
 \underline{}
 \end{array}$$

33. $35 \overline{) 0045.}$

$$\begin{array}{r}
 0 \\
 \underline{15} \\
 00 \\
 \underline{157} \\
 140 \\
 \underline{175} \\
 175 \\
 \underline{}
 \end{array}$$

Percentage Solutions

1. 60 x .50 30	2. 40 x .40 16	3. 50 x .10 5	4. 40 x .10 4	5. 50 x .60 30
6. 60 x .30 18	7. 30 x .10 3	8. 30 x .40 12	9. 10 x .20 2	10. 90 x .16 14.4
11. 60 x .13 7.8	12. 70 x .02 1.4	13. 70 x .16 11.2	14. 80 x .09 7.2	15. 20 x .15 3
16. 30 x .18 5.4	17. 27 x .80 21.6	18. 17 x .60 10.2	19. 22 x .10 2.2	20. 8 x .60 4.8
21. 24 x .70 16.8	22. 27 x .24 6.48	23. 18 x .03 .54	24. 11 x .18 1.98	25. 8 x .19 1.52
26. 82 x .37 30.34	27. 7 x .17 1.19			

Fractions Addition Solutions

1. $\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$

2. $\frac{2}{8} + \frac{2}{8} = \frac{4}{8}$

3. $\frac{1}{7} + \frac{9}{7} = \frac{10}{7}$

4. $\frac{8}{5} + \frac{9}{5} = \frac{17}{5}$

$\frac{4}{8} = \frac{1}{2}$

$\frac{10}{7} = 1 \frac{3}{7}$

$\frac{17}{5} = 3 \frac{2}{5}$

5. $\frac{1}{5} + \frac{7}{5} = \frac{8}{5}$

6. $\frac{4}{3} + \frac{1}{3} = \frac{5}{3}$

7. $\frac{7}{4} + \frac{6}{4} = \frac{13}{4}$

8. $\frac{6}{2} + \frac{8}{2} = \frac{14}{2}$

$\frac{8}{5} = 1 \frac{3}{5}$

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

$\frac{13}{4} = 3 \frac{1}{4}$

$\frac{14}{2} = 7$

9. $\frac{7}{8} + \frac{8}{8} = \frac{15}{8}$

10. $\frac{1}{10} + \frac{1}{7} = ?$

11. $\frac{1}{8} + \frac{1}{7} = ?$

12. $\frac{1}{9} + \frac{1}{9} = \frac{2}{9}$

$\frac{15}{8} = 1 \frac{7}{8}$

$\frac{7}{70} + \frac{10}{70} = \frac{17}{70}$

$\frac{7}{56} + \frac{8}{56} = \frac{15}{56}$

13. $\frac{1}{4} + \frac{1}{7} = ?$

14. $\frac{1}{6} + \frac{1}{6} = \frac{2}{6}$

15. $\frac{1}{10} + \frac{1}{10} = \frac{2}{10}$

16. $\frac{1}{9} + \frac{1}{5} = ?$

$\frac{7}{28} + \frac{4}{28} = \frac{11}{28}$

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

$\frac{2}{10} = \frac{1}{5}$

$\frac{5}{45} + \frac{9}{45} = \frac{14}{45}$

17. $\frac{1}{2} + \frac{1}{6} = ?$

18. $\frac{1}{9} + \frac{1}{10} = ?$

19. $\frac{1}{8} + \frac{1}{6} = ?$

20. $\frac{2}{7} + \frac{5}{8} = ?$

$\frac{3}{6} + \frac{1}{6} = \frac{4}{6}$

$\frac{10}{90} + \frac{9}{90} = \frac{19}{90}$

$\frac{3}{24} + \frac{4}{24} = \frac{7}{24}$

$\frac{16}{56} + \frac{35}{56} = \frac{51}{56}$

$\frac{4}{6} = \frac{2}{3}$

$$21. \quad \frac{1}{5} + \frac{2}{5} = \frac{3}{5}$$

$$22. \quad \frac{2}{6} + \frac{2}{6} = \frac{4}{6}$$

$$23. \quad \frac{4}{9} + \frac{1}{9} = \frac{5}{9}$$

$$24. \quad \frac{1}{7} + \frac{2}{9} = ?$$

$$\frac{4}{6} = \frac{2}{3}$$

$$\frac{9}{63} + \frac{14}{63} = \frac{23}{63}$$

$$25. \quad \frac{8}{19} + \frac{7}{13} = ?$$

$$26. \quad \frac{1}{16} + \frac{1}{14} = ?$$

$$28. \quad \frac{1}{10} + \frac{7}{9} = ?$$

$$29. \quad \frac{2}{12} + \frac{8}{12} = \frac{10}{12}$$

$$\frac{104}{247} + \frac{133}{247} = \frac{237}{247}$$

$$\frac{7}{112} + \frac{8}{112} = \frac{15}{112}$$

$$\frac{9}{90} + \frac{70}{90} = \frac{79}{90}$$

$$\frac{10}{12} = \frac{5}{6}$$

$$30. \quad \frac{6}{13} + \frac{1}{9} = ?$$

$$\frac{54}{117} + \frac{13}{117} = \frac{67}{117}$$

Mixed and Improper Fraction Solutions

1. $1 \frac{4}{6} + 2 \frac{1}{4} = ?$

$$\frac{10}{6} + \frac{9}{4} = ?$$

$$\frac{40}{24} + \frac{54}{24} = \frac{94}{24}$$

$$\frac{94}{24} = 3 \frac{22}{24} = 3 \frac{11}{12}$$

2. $2 \frac{1}{5} + 1 = ?$

$$\frac{11}{5} + \frac{5}{5} = \frac{16}{5}$$

$$\frac{16}{5} = 3 \frac{1}{5}$$

3. $\frac{2}{4} + 2 \frac{2}{3} = ?$

$$\frac{2}{4} + \frac{8}{3} = ?$$

$$\frac{6}{12} + \frac{32}{12} = \frac{38}{12}$$

$$\frac{38}{12} = 3 \frac{2}{12} = 3 \frac{1}{6}$$

4. $2 + 2 \frac{2}{3} = ?$

$$\frac{6}{3} + \frac{8}{3} = \frac{14}{3}$$

$$\frac{14}{3} = 4 \frac{2}{3}$$

5. $1 \frac{4}{5} + 1 \frac{3}{6} = ?$

$$\frac{9}{5} + \frac{9}{6} = ?$$

$$\frac{54}{30} + \frac{45}{30} = \frac{99}{30}$$

$$\frac{99}{30} = 3 \frac{9}{30} = 3 \frac{3}{10}$$

6. $\frac{3}{4} + 2 \frac{2}{4} = ?$

$$\frac{3}{4} + \frac{10}{4} = \frac{13}{4}$$

$$\frac{13}{4} = 3 \frac{1}{4}$$

7. $\frac{5}{6} + \frac{2}{6} = \frac{7}{6}$

$$\frac{7}{6} = 1 \frac{1}{6}$$

8. $1 \frac{2}{6} + 1 \frac{2}{3} = ?$

$$\frac{8}{6} + \frac{5}{3} = ?$$

$$\frac{8}{6} + \frac{10}{6} = \frac{18}{6}$$

$$\frac{18}{6} = 3$$

9. $\frac{5}{6} + 1 \frac{2}{6} = ?$

$$\frac{5}{6} + \frac{8}{6} = \frac{13}{6}$$

$$\frac{13}{6} = 2 \frac{1}{6}$$

10. $2 \frac{3}{4} + \frac{3}{4} = ?$

$$\frac{11}{4} + \frac{3}{4} = \frac{14}{4}$$

$$\frac{14}{4} = 3 \frac{2}{4} = 3 \frac{1}{2}$$

11. $\frac{2}{5} + \frac{4}{6} = ?$

$$\frac{12}{30} + \frac{20}{30} = \frac{32}{30}$$

$$\frac{32}{30} = 1 \frac{2}{30} = 1 \frac{1}{15}$$

12. $1 \frac{3}{4} + 1 = ?$ 31

$$\frac{7}{4} + \frac{4}{4} = \frac{11}{4}$$

$$\frac{11}{4} = 2 \frac{3}{4}$$

13. $1 \frac{6}{12} + 1 \frac{8}{9} = ?$

$$\frac{18}{12} + \frac{17}{9} = ?$$

$$\frac{54}{36} + \frac{68}{36} = \frac{122}{36}$$

$$\frac{122}{36} = 3 \frac{14}{36} = 3 \frac{7}{18}$$

14. $\frac{10}{11} + 1 \frac{1}{9} = ?$

$$\frac{10}{11} + \frac{10}{9} = ?$$

$$\frac{90}{99} + \frac{110}{99} = \frac{200}{99}$$

$$\frac{200}{99} = 2 \frac{2}{99}$$

15. $1 \frac{9}{10} + 1 \frac{3}{11} = ?$

$$\frac{19}{10} + \frac{14}{11} = ?$$

$$\frac{209}{110} + \frac{140}{110} = \frac{349}{110}$$

$$\frac{349}{110} = 3 \frac{19}{110}$$

16. $1 \frac{2}{8} + 2 = ?$

$$\frac{10}{8} + \frac{16}{8} = \frac{26}{8}$$

$$\frac{26}{8} = 3 \frac{2}{8} = 3 \frac{1}{4}$$

17. $2 \frac{2}{5} + 2 \frac{2}{7} = ?$

$$\frac{12}{5} + \frac{17}{7} = ?$$

$$\frac{84}{35} + \frac{85}{35} = \frac{169}{35}$$

$$\frac{169}{35} = 4 \frac{29}{35}$$

18. $3 \frac{1}{5} + 3 = ?$

$$\frac{16}{5} + \frac{15}{5} = \frac{31}{5}$$

$$\frac{31}{5} = 6 \frac{1}{5}$$

19. $1 \frac{7}{10} + 1 \frac{6}{11} = ?$

$$\frac{17}{10} + \frac{17}{11} = ?$$

$$\frac{187}{110} + \frac{170}{110} = \frac{357}{110}$$

$$\frac{357}{110} = 3 \frac{27}{110}$$

20. $2 \frac{6}{7} + 2 \frac{2}{9} = ?$

$$\frac{20}{7} + \frac{20}{9} = ?$$

$$\frac{180}{63} + \frac{140}{63} = \frac{320}{63}$$

$$\frac{320}{63} = 5 \frac{5}{63}$$

21. $1 \frac{2}{9} + 2 = ?$

$$\frac{11}{9} + \frac{18}{9} = \frac{29}{9}$$

$$\frac{29}{9} = 3 \frac{2}{9}$$

22. $1 \frac{1}{12} + \frac{10}{12} = ?$

$$\frac{13}{12} + \frac{10}{12} = \frac{23}{12}$$

$$\frac{23}{12} = 1 \frac{11}{12}$$

23. $1 \frac{5}{11} + 1 \frac{5}{8} = ?$

$$\frac{16}{11} + \frac{13}{8} = ?$$

$$\frac{128}{88} + \frac{143}{88} = \frac{271}{88}$$

$$\frac{271}{88} = 3 \frac{7}{88}$$

24. $2 + 2 \frac{1}{9} = ?$

$$\frac{18}{9} + \frac{19}{9} = \frac{37}{9}$$

$$\frac{37}{9} = 4 \frac{1}{9}$$

25. $1 \frac{2}{11} + 1 \frac{4}{12} = ?$

$$\frac{13}{11} + \frac{16}{12} = ?$$

$$\frac{156}{132} + \frac{176}{132} = \frac{332}{132}$$

$$\frac{332}{132} = 2 \frac{68}{132} = 2 \frac{17}{33}$$

26. $2 \frac{1}{9} + 1 \frac{2}{9} = ?$

$$\frac{19}{9} + \frac{11}{9} = \frac{30}{9}$$

$$\frac{30}{9} = 3 \frac{3}{9} = 3 \frac{1}{3}$$

27. $1 \frac{6}{9} + 1 \frac{4}{7} = ?$

$$\frac{15}{9} + \frac{11}{7} = ?$$

$$\frac{90}{63} + \frac{99}{63} = \frac{189}{63}$$

$$\frac{189}{63} = 3$$

$$28. \quad \frac{10}{6} + \frac{9}{4} = ?$$

$$\frac{40}{24} + \frac{54}{24} = \frac{94}{24}$$

$$\frac{94}{24} = 3 \frac{22}{24} = 3 \frac{11}{12}$$

$$29. \quad \frac{11}{5} + \frac{6}{6} = ?$$

$$\frac{66}{30} + \frac{30}{30} = \frac{96}{30}$$

$$\frac{96}{30} = 3 \frac{6}{30} = 3 \frac{1}{5}$$

$$30. \quad \frac{2}{4} + \frac{8}{3} = ?$$

$$\frac{6}{12} + \frac{32}{12} = \frac{38}{12}$$

$$\frac{38}{12} = 3 \frac{2}{12} = 3 \frac{1}{6}$$

$$31. \quad \frac{4}{2} + \frac{8}{3} = ?$$

$$\frac{12}{6} + \frac{16}{6} = \frac{28}{6}$$

$$\frac{28}{6} = 4 \frac{4}{6} = 4 \frac{2}{3}$$

$$32. \quad \frac{8}{2} + \frac{10}{2} = \frac{18}{2}$$

$$\frac{18}{2} = 9$$

$$33. \quad \frac{9}{5} + \frac{9}{6} = ?$$

$$\frac{54}{30} + \frac{45}{30} = \frac{99}{30}$$

$$\frac{99}{30} = 3 \frac{9}{30} = 3 \frac{3}{10}$$

$$34. \quad \frac{12}{3} + \frac{12}{4} = ?$$

$$\frac{48}{12} + \frac{36}{12} = \frac{84}{12}$$

$$\frac{84}{12} = 7$$

$$35. \quad \frac{3}{4} + \frac{10}{4} = \frac{13}{4}$$

$$\frac{13}{4} = 3 \frac{1}{4}$$

$$36. \quad \frac{5}{6} + \frac{2}{6} = \frac{7}{6}$$

$$\frac{7}{6} = 1 \frac{1}{6}$$

$$37. \quad \frac{18}{12} + \frac{17}{9} = ?$$

$$\frac{54}{36} + \frac{68}{36} = \frac{122}{36}$$

$$\frac{122}{36} = 3 \frac{14}{36} = 3 \frac{7}{18}$$

$$38. \quad \frac{10}{11} + \frac{10}{9} = ?$$

$$\frac{90}{99} + \frac{110}{99} = \frac{200}{99}$$

$$\frac{200}{99} = 2 \frac{2}{99}$$

$$39. \quad \frac{19}{10} + \frac{14}{11} = ?$$

$$\frac{209}{110} + \frac{140}{110} = \frac{349}{110}$$

$$\frac{349}{110} = 3 \frac{19}{110}$$

$$40. \quad \frac{10}{8} + \frac{16}{8} = \frac{26}{8}$$

$$\frac{26}{8} = 3 \frac{2}{8} = 3 \frac{1}{4}$$

$$41. \quad \frac{12}{5} + \frac{16}{7} = ?$$

$$\frac{84}{35} + \frac{80}{35} = \frac{164}{35}$$

$$\frac{164}{35} = 4 \frac{24}{35}$$

$$42. \quad \frac{16}{5} + \frac{18}{6} = ?$$

$$\frac{96}{30} + \frac{90}{30} = \frac{186}{30}$$

$$\frac{186}{30} = 6 \frac{6}{30} = 6 \frac{1}{5}$$

$$43. \quad \frac{17}{10} + \frac{17}{11} = ?$$

$$\frac{187}{110} + \frac{170}{110} = \frac{357}{110}$$

$$\frac{357}{110} = 3 \frac{27}{110}$$

$$44. \quad \frac{20}{7} + \frac{20}{9} = ?$$

$$\frac{180}{63} + \frac{140}{63} = \frac{320}{63}$$

$$\frac{320}{63} = 5 \frac{5}{63}$$

$$45. \quad \frac{11}{9} + \frac{18}{9} = \frac{29}{9}$$

$$\frac{29}{9} = 3 \frac{2}{9}$$

$$46. \quad \frac{13}{12} + \frac{10}{12} = \frac{23}{12}$$

$$\frac{23}{12} = 1 \frac{11}{12}$$

$$47. \quad \frac{16}{11} + \frac{13}{8} = ?$$

$$\frac{128}{88} + \frac{143}{88} = \frac{271}{88}$$

$$\frac{271}{88} = 3 \frac{7}{88}$$

$$48. \quad \frac{10}{5} + \frac{19}{9} = ?$$

$$\frac{90}{45} + \frac{95}{45} = \frac{185}{45}$$

$$\frac{185}{45} = 4 \frac{5}{45} = 4 \frac{1}{9}$$

Fractions Subtraction Solutions

$$1. \quad \frac{8}{10} - \frac{7}{10} = \frac{1}{10}$$

$$2. \quad \frac{8}{2} - \frac{6}{2} = \frac{2}{2}$$

$$3. \quad \frac{9}{7} - \frac{1}{7} = \frac{8}{7}$$

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

$$\frac{8}{7} = 1 \frac{1}{7}$$

$$4. \quad \frac{9}{5} - \frac{8}{5} = \frac{1}{5}$$

$$5. \quad \frac{7}{5} - \frac{1}{5} = \frac{6}{5}$$

$$6. \quad \frac{4}{3} - \frac{1}{3} = \frac{3}{3}$$

$$\frac{6}{5} = 1 \frac{1}{5}$$

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

$$7. \quad \frac{1}{7} - \frac{1}{10} = ?$$

$$8. \quad \frac{1}{7} - \frac{1}{8} = ?$$

$$9. \quad \frac{1}{8} - \frac{1}{9} = ?$$

$$\frac{10}{70} - \frac{7}{70} = \frac{3}{70}$$

$$\frac{8}{56} - \frac{7}{56} = \frac{1}{56}$$

$$\frac{9}{72} - \frac{8}{72} = \frac{1}{72}$$

$$10. \quad \frac{1}{2} - \frac{1}{4} = ?$$

$$11. \quad \frac{1}{4} - \frac{1}{7} = ?$$

$$12. \quad \frac{1}{5} - \frac{1}{9} = ?$$

$$\frac{2}{4} - \frac{1}{4} = \frac{1}{4}$$

$$\frac{7}{28} - \frac{4}{28} = \frac{3}{28}$$

$$\frac{9}{45} - \frac{5}{45} = \frac{4}{45}$$

$$13. \quad \frac{13}{19} - \frac{7}{13} = ?$$

$$14. \quad \frac{3}{16} - \frac{1}{14} = ?$$

$$15. \quad \frac{9}{15} - \frac{5}{18} = ?$$

$$\frac{169}{247} - \frac{133}{247} = \frac{36}{247}$$

$$\frac{42}{112} - \frac{16}{112} = \frac{26}{112}$$

$$\frac{162}{270} - \frac{75}{270} = \frac{87}{270}$$

$$\frac{26}{112} = \frac{13}{56}$$

$$\frac{87}{270} = \frac{29}{90}$$

$$16. \quad \frac{4}{19} - \frac{1}{20} = ?$$

$$\frac{80}{380} - \frac{19}{380} = \frac{61}{380}$$

$$17. \quad \frac{6}{17} - \frac{3}{10} = ?$$

$$\frac{60}{170} - \frac{51}{170} = \frac{9}{170}$$

$$18. \quad \frac{6}{13} - \frac{1}{9} = ?$$

$$\frac{54}{117} - \frac{13}{117} = \frac{41}{117}$$

$$19. \quad 2 \frac{1}{4} - 1 \frac{4}{6} = ?$$

$$\frac{9}{4} - \frac{10}{6} = ?$$

$$\frac{27}{12} - \frac{20}{12} = \frac{7}{12}$$

$$20. \quad 2 \frac{1}{5} - 1 = ?$$

$$\frac{11}{5} - \frac{5}{5} = \frac{6}{5}$$

$$\frac{6}{5} = 1 \frac{1}{5}$$

$$21. \quad 2 \frac{2}{3} - \frac{2}{4} = ?$$

$$\frac{8}{3} - \frac{2}{4} = ?$$

$$\frac{32}{12} - \frac{6}{12} = \frac{26}{12}$$

$$\frac{26}{12} = 2 \frac{2}{12} = 2 \frac{1}{6}$$

$$22. \quad 5 - 4 = 1$$

$$23. \quad 2 \frac{2}{3} - 2 = ?$$

$$\frac{8}{3} - \frac{6}{3} = \frac{2}{3}$$

$$24. \quad 1 \frac{4}{5} - 1 \frac{3}{6} = ?$$

$$\frac{9}{5} - \frac{9}{6} = ?$$

$$\frac{54}{30} - \frac{45}{30} = \frac{9}{30} = \frac{3}{10}$$

25. $2 \frac{2}{4} - \frac{3}{4} = ?$

$$\frac{10}{4} - \frac{3}{4} = \frac{7}{4}$$

$$\frac{7}{4} = 1 \frac{3}{4}$$

26. $1 \frac{2}{3} - 1 \frac{2}{6} = ?$

$$\frac{5}{3} - \frac{8}{6} = ?$$

$$\frac{10}{6} - \frac{8}{6} = \frac{2}{6} = \frac{1}{3}$$

27. $1 \frac{2}{6} - \frac{5}{6} = ?$

$$\frac{8}{6} - \frac{5}{6} = \frac{3}{6}$$

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

28. $2 \frac{2}{5} - 2 \frac{2}{7} = ?$

$$\frac{12}{5} - \frac{16}{7} = ?$$

$$\frac{84}{35} - \frac{80}{35} = \frac{4}{35}$$

29. $3 \frac{1}{5} - 3 = ?$

$$\frac{16}{5} - \frac{15}{5} = \frac{1}{5}$$

30. $1 \frac{9}{10} - 1 \frac{3}{11} = ?$

$$\frac{19}{10} - \frac{14}{11} = ?$$

$$\frac{209}{110} - \frac{140}{110} = \frac{69}{110}$$

31. $1 \frac{7}{10} - 1 \frac{6}{11} = ?$

$$\frac{17}{10} - \frac{17}{11} = ?$$

$$\frac{187}{110} - \frac{170}{110} = \frac{17}{110}$$

32. $2 \frac{6}{7} - 2 \frac{2}{9} = ?$

$$\frac{20}{7} - \frac{20}{9} = ?$$

$$\frac{180}{63} - \frac{140}{63} = \frac{40}{63}$$

33. $1 \frac{6}{9} - 1 \frac{4}{7} = ?$

$$\frac{15}{9} - \frac{11}{7} = ?$$

$$\frac{105}{63} - \frac{99}{63} = \frac{6}{63} = \frac{2}{21}$$

$$34. \quad \frac{9}{4} - \frac{10}{6} = ?$$

$$\frac{27}{12} - \frac{20}{12} = \frac{7}{12}$$

$$35. \quad \frac{11}{5} - \frac{6}{6} = ?$$

$$\frac{66}{30} - \frac{30}{30} = \frac{36}{30}$$

$$\frac{36}{30} = 1 \frac{6}{30} = 1 \frac{1}{5}$$

$$36. \quad \frac{8}{3} - \frac{2}{4} = ?$$

$$\frac{32}{12} - \frac{6}{12} = \frac{26}{12}$$

$$\frac{26}{12} = 2 \frac{2}{12} = 2 \frac{1}{6}$$

$$37. \quad \frac{8}{3} - \frac{4}{2} = ?$$

$$\frac{16}{6} - \frac{12}{6} = \frac{4}{6}$$

$$\frac{4}{6} = \frac{2}{3}$$

$$38. \quad \frac{10}{2} - \frac{8}{2} = \frac{2}{2}$$

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

$$39. \quad \frac{9}{5} - \frac{9}{6} = ?$$

$$\frac{54}{30} - \frac{45}{30} = \frac{9}{30} = \frac{3}{10}$$

$$40. \quad \frac{19}{10} - \frac{14}{11} = ?$$

$$\frac{209}{110} - \frac{140}{110} = \frac{69}{110}$$

$$41. \quad \frac{12}{5} - \frac{16}{7} = ?$$

$$\frac{84}{35} - \frac{80}{35} = \frac{4}{35}$$

$$42. \quad \frac{16}{5} - \frac{18}{6} = ?$$

$$\frac{96}{30} - \frac{90}{30} = \frac{6}{30} = \frac{1}{5}$$

$$43. \quad \frac{17}{10} - \frac{17}{11} = ?$$

$$\frac{187}{110} - \frac{170}{110} = \frac{17}{110}$$

$$44. \quad \frac{20}{7} - \frac{20}{9} = ?$$

$$\frac{180}{63} - \frac{140}{63} = \frac{40}{63}$$

$$45. \quad \frac{11}{9} - \frac{18}{9} = -\frac{7}{9}$$

Fraction Solutions Multiplication

$$1. \quad \frac{8}{10} \times \frac{7}{10} = \frac{56}{100}$$

$$\frac{56}{100} = \frac{14}{25}$$

$$2. \quad \frac{6}{2} \times \frac{8}{2} = \frac{48}{4}$$

$$\frac{48}{4} = 12$$

$$3. \quad \frac{1}{7} \times \frac{9}{7} = \frac{9}{49}$$

$$4. \quad \frac{8}{5} \times \frac{9}{5} = \frac{72}{25}$$

$$\frac{72}{25} = 2 \frac{22}{25}$$

$$5. \quad \frac{1}{5} \times \frac{7}{5} = \frac{7}{25}$$

$$6. \quad \frac{4}{10} \times \frac{1}{10} = \frac{4}{100}$$

$$\frac{4}{100} = \frac{1}{25}$$

$$7. \quad \frac{1}{10} \times \frac{1}{7} = \frac{1}{70}$$

$$8. \quad \frac{1}{8} \times \frac{1}{7} = \frac{1}{56}$$

$$9. \quad \frac{1}{2} \times \frac{1}{4} = \frac{1}{8}$$

$$10. \quad \frac{8}{8} \times \frac{1}{6} = \frac{8}{48}$$

$$\frac{8}{48} = \frac{1}{6}$$

$$11. \quad \frac{1}{8} \times \frac{1}{6} = \frac{1}{48}$$

$$12. \quad \frac{3}{8} \times \frac{6}{9} = \frac{18}{72}$$

$$\frac{18}{72} = \frac{1}{4}$$

$$13. \quad \frac{8}{19} \times \frac{7}{13} = \frac{56}{247}$$

$$14. \quad \frac{1}{16} \times \frac{1}{14} = \frac{1}{224}$$

$$15. \quad \frac{9}{15} \times \frac{5}{18} = \frac{45}{270}$$

$$\frac{45}{270} = \frac{1}{6}$$

$$16. \quad \frac{7}{16} \times \frac{8}{17} = \frac{56}{272}$$

$$\frac{56}{272} = \frac{7}{34}$$

$$17. \quad \frac{4}{19} \times \frac{1}{20} = \frac{4}{380}$$

$$\frac{4}{380} = \frac{1}{95}$$

$$18. \quad \frac{9}{12} \times \frac{1}{12} = \frac{9}{144}$$

$$\frac{9}{144} = \frac{1}{16}$$

19. $1 \frac{4}{6} \times 2 \frac{1}{4} = ?$

$$\frac{10}{6} \times \frac{9}{4} = \frac{90}{24}$$

$$\frac{90}{24} = 3 \frac{18}{24} = 3 \frac{3}{4}$$

20. $\frac{2}{4} \times 2 \frac{2}{3} = ?$

$$\frac{2}{4} \times \frac{8}{3} = \frac{16}{12}$$

$$\frac{16}{12} = 1 \frac{4}{12} = 1 \frac{1}{3}$$

21. $4 \times 5 = 20$

22. $1 \frac{4}{5} \times 1 \frac{3}{6} = ?$

$$\frac{9}{5} \times \frac{9}{6} = \frac{81}{30}$$

$$\frac{81}{30} = 2 \frac{21}{30} = 2 \frac{7}{10}$$

23. $1 \frac{2}{6} \times 1 \frac{2}{3} = ?$

$$\frac{8}{6} \times \frac{5}{3} = \frac{40}{18}$$

$$\frac{40}{18} = 2 \frac{4}{18} = 2 \frac{2}{9}$$

24. $2 \frac{3}{4} \times \frac{3}{4} = ?$

$$\frac{11}{4} \times \frac{3}{4} = \frac{33}{16}$$

$$\frac{33}{16} = 2 \frac{1}{16}$$

25. $\frac{2}{5} \times \frac{4}{6} = \frac{8}{30}$

$$\frac{8}{30} = \frac{4}{15}$$

26. $2 \times 2 \frac{2}{4} = ?$

$$\frac{2}{1} \times \frac{10}{4} = \frac{20}{4}$$

$$\frac{20}{4} = 5$$

27. $1 \frac{4}{5} \times 4 = ?$

$$\frac{9}{5} \times \frac{4}{1} = \frac{36}{5}$$

$$\frac{36}{5} = 7 \frac{1}{5}$$

28. $1 \frac{6}{12} \times 1 \frac{8}{9} = ?$

$$\frac{18}{12} \times \frac{17}{9} = \frac{306}{108}$$

$$\frac{306}{108} = 2 \frac{90}{108} = 2 \frac{5}{6}$$

29. $\frac{10}{11} \times 1 \frac{1}{9} = ?$

$$\frac{10}{11} \times \frac{10}{9} = \frac{100}{99}$$

$$\frac{100}{99} = 1 \frac{1}{99}$$

30. $2 \frac{2}{5} \times 2 \frac{2}{7} = ?$

$$\frac{12}{5} \times \frac{16}{7} = \frac{192}{35}$$

$$\frac{192}{35} = 5 \frac{17}{35}$$

$$31. \quad \frac{10}{6} \times \frac{9}{4} = \frac{90}{24}$$

$$\frac{90}{24} = 3 \frac{18}{24} = 3 \frac{3}{4}$$

$$32. \quad \frac{12}{3} \times \frac{12}{4} = \frac{144}{12}$$

$$\frac{144}{12} = 12$$

$$33. \quad \frac{11}{4} \times \frac{4}{4} = \frac{44}{16}$$

$$\frac{44}{16} = 2 \frac{12}{16} = 2 \frac{3}{4}$$

$$34. \quad \frac{18}{12} \times \frac{17}{9} = \frac{306}{108}$$

$$\frac{306}{108} = 2 \frac{90}{108} = 2 \frac{5}{6}$$

$$35. \quad \frac{20}{7} \times \frac{20}{9} = \frac{400}{63}$$

$$\frac{400}{63} = 6 \frac{22}{63}$$

$$36. \quad \frac{13}{12} \times \frac{10}{12} = \frac{130}{144}$$

$$\frac{130}{144} = \frac{65}{72}$$

Fractions Division

1. $\frac{6}{2} \div \frac{8}{2} = ?$

$$\frac{6}{2} \times \frac{2}{8} = \frac{12}{16}$$

$$\frac{12}{16} = \frac{3}{4}$$

2. $\frac{8}{5} \div \frac{9}{5} = ?$

$$\frac{8}{5} \times \frac{5}{9} = \frac{40}{45}$$

$$\frac{40}{45} = \frac{8}{9}$$

3. $\frac{1}{7} \div \frac{9}{7} = ?$

$$\frac{1}{7} \times \frac{7}{9} = \frac{7}{63}$$

$$\frac{7}{63} = \frac{1}{9}$$

4. $\frac{2}{8} \div \frac{2}{8} = ?$

$$\frac{2}{8} \times \frac{8}{2} = \frac{16}{16}$$

$$\frac{16}{16} = 1$$

5. $\frac{9}{10} \div \frac{4}{10} = ?$

$$\frac{9}{10} \times \frac{10}{4} = \frac{90}{40}$$

$$\frac{90}{40} = 2 \frac{10}{40} = 2 \frac{1}{4}$$

6. $\frac{1}{9} \div \frac{6}{9} = ?$

$$\frac{1}{9} \times \frac{9}{6} = \frac{9}{54}$$

$$\frac{9}{54} = \frac{1}{6}$$

7. $\frac{1}{10} \div \frac{1}{7} = ?$

$$\frac{1}{10} \times \frac{7}{1} = \frac{7}{10}$$

8. $\frac{1}{8} \div \frac{1}{7} = ?$

$$\frac{1}{8} \times \frac{7}{1} = \frac{7}{8}$$

9. $\frac{1}{8} \div \frac{1}{9} = ?$

$$\frac{1}{8} \times \frac{9}{1} = \frac{9}{8}$$

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

10. $\frac{1}{2} \div \frac{1}{4} = ?$

$$\frac{1}{2} \times \frac{4}{1} = \frac{4}{2}$$

$$\frac{4}{2} = 2$$

11. $\frac{1}{9} \div \frac{1}{5} = ?$

$$\frac{1}{9} \times \frac{5}{1} = \frac{5}{9}$$

12. $\frac{1}{9} \div \frac{1}{10} = ?$

$$\frac{1}{9} \times \frac{10}{1} = \frac{10}{9}$$

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

$$13. \quad \frac{8}{9} \div \frac{1}{6} = ?$$

$$\frac{8}{9} \times \frac{6}{1} = \frac{48}{9}$$

$$\frac{48}{9} = 5 \frac{3}{9} = 5 \frac{1}{3}$$

$$14. \quad \frac{1}{8} \div \frac{1}{6} = ?$$

$$\frac{1}{8} \times \frac{6}{1} = \frac{6}{8}$$

$$\frac{6}{8} = \frac{3}{4}$$

$$15. \quad \frac{2}{7} \div \frac{5}{8} = ?$$

$$\frac{2}{7} \times \frac{8}{5} = \frac{16}{35}$$

$$16. \quad \frac{1}{7} \div \frac{2}{9} = ?$$

$$\frac{1}{7} \times \frac{9}{2} = \frac{9}{14}$$

$$17. \quad \frac{8}{19} \div \frac{7}{13} = ?$$

$$\frac{8}{19} \times \frac{13}{7} = \frac{104}{133}$$

$$18. \quad \frac{1}{16} \div \frac{1}{14} = ?$$

$$\frac{1}{16} \times \frac{14}{1} = \frac{14}{16}$$

$$\frac{14}{16} = \frac{7}{8}$$

$$19. \quad \frac{9}{15} \div \frac{5}{18} = ?$$

$$\frac{9}{15} \times \frac{18}{5} = \frac{162}{75}$$

$$\frac{162}{75} = 2 \frac{12}{75} = 2 \frac{4}{25}$$

$$20. \quad \frac{2}{8} \div \frac{10}{13} = ?$$

$$\frac{2}{8} \times \frac{13}{10} = \frac{26}{80}$$

$$\frac{26}{80} = \frac{13}{40}$$

$$21. \quad \frac{2}{12} \div \frac{8}{12} = ?$$

$$\frac{2}{12} \times \frac{12}{8} = \frac{24}{96}$$

$$\frac{24}{96} = \frac{1}{4}$$

$$22. \quad \frac{4}{19} \div \frac{1}{20} = ?$$

$$\frac{4}{19} \times \frac{20}{1} = \frac{80}{19}$$

$$\frac{80}{19} = 4 \frac{4}{19}$$

$$23. \quad \frac{6}{17} \div \frac{3}{10} = ?$$

$$\frac{6}{17} \times \frac{10}{3} = \frac{60}{51}$$

$$\frac{60}{51} = 1 \frac{9}{51}$$

$$24. \quad \frac{3}{17} \div \frac{6}{20} = ?$$

$$\frac{3}{17} \times \frac{20}{6} = \frac{60}{102}$$

$$\frac{60}{102} = \frac{30}{51}$$

25. $1 \frac{4}{6} \div 2 \frac{1}{4} = ?$

$$\frac{10}{6} \div \frac{9}{4} = ?$$

$$\frac{10}{6} \times \frac{4}{9} = \frac{40}{54} = \frac{20}{27}$$

26. $2 \div 2 \frac{2}{3} = ?$

$$\frac{6}{3} \div \frac{8}{3} = ?$$

$$\frac{6}{3} \times \frac{3}{8} = \frac{18}{24} = \frac{3}{4}$$

27. $1 \frac{4}{5} \div 1 \frac{3}{6} = ?$

$$\frac{9}{5} \div \frac{9}{6} = ?$$

$$\frac{9}{5} \times \frac{6}{9} = \frac{54}{45} = 1 \frac{9}{45}$$

$$1 \frac{9}{45} = 1 \frac{1}{5}$$

28. $1 \frac{2}{6} \div 1 \frac{2}{3} = ?$

$$\frac{8}{6} \div \frac{5}{3} = ?$$

$$\frac{8}{6} \times \frac{3}{5} = \frac{24}{30} = \frac{4}{5}$$

29. $1 \div 2 \frac{3}{4} = ?$

$$\frac{4}{4} \div \frac{11}{4} = ?$$

$$\frac{4}{4} \times \frac{4}{11} = \frac{16}{44} = \frac{4}{11}$$

30. $2 \frac{3}{4} \div \frac{3}{4} = ?$

$$\frac{11}{4} \times \frac{4}{3} = \frac{44}{12}$$

$$\frac{44}{12} = 3 \frac{8}{12} = 3 \frac{2}{3}$$

31. $1 \frac{9}{10} \div 1 \frac{3}{11} = ?$

$$\frac{19}{10} \div \frac{14}{11} = ?$$

$$\frac{19}{10} \times \frac{11}{14} = \frac{209}{140}$$

$$\frac{209}{140} = 1 \frac{69}{140}$$

32. $2 \frac{2}{5} \div 2 \frac{2}{7} = ?$

$$\frac{12}{5} \div \frac{16}{7} = ?$$

$$\frac{12}{5} \times \frac{7}{16} = \frac{84}{80}$$

$$\frac{84}{80} = 1 \frac{4}{80} = 1 \frac{1}{20}$$

33. $2 \div 2 \frac{1}{9} = ?$

$$\frac{18}{9} \div \frac{19}{9} = ?$$

$$\frac{18}{9} \times \frac{9}{19} = \frac{162}{171}$$

$$\frac{162}{171} = \frac{18}{19}$$

34. $\frac{10}{6} \div \frac{9}{4} = ?$

$$\frac{10}{6} \times \frac{4}{9} = \frac{40}{54}$$

$$\frac{40}{54} = \frac{20}{27}$$

35. $\frac{8}{2} \div \frac{10}{2} = ?$

$$\frac{8}{2} \times \frac{2}{10} = \frac{16}{20}$$

$$\frac{16}{20} = \frac{4}{5}$$

36. $\frac{9}{5} \div \frac{9}{6} = ?$ 45

$$\frac{9}{5} \times \frac{6}{9} = \frac{54}{45}$$

$$\frac{54}{45} = 1 \frac{9}{45} = 1 \frac{1}{5}$$