9E

1) $2 + .4$ x $.2$ = $.4 + .08$; 2.4 x $.2$ = $.48$

2) 1.98

3) .17

4) .01

5) 280,000

6) 3,600

7) 500

8) meter

9) quart

10) gram

11) $7\frac{6}{15} - 3\frac{5}{15} = 4\frac{1}{15}$

12) $9 - 2\frac{1}{2} = 8\frac{2}{2} - 2\frac{1}{2} = 6\frac{1}{2}$

13) $6\frac{7}{14} - 4\frac{2}{14} = 2\frac{5}{14}$

14) $7\frac{1}{2} - 1\frac{1}{4} = 7\frac{2}{4} - 1\frac{1}{4} = 6\frac{1}{4}$ dollars; or $6.25

If one fraction can be made into an equivalent fraction with the same denominator as the other, you don't have to use the rule of four. The final result is the same.

15) 4.4 x .1 = .44

16) 45.15 + 34.1 + 7.05 = 86.3 pounds

17) 6 x 1,000 = 6,000

18) a meter is a little more than a yard, so he ran faster in the 100 meter dash

9F

1) $2 + .3$ x $.3$ = $.6 + .09$; 2.3 x $.3$ = $.69$

2) 2.73

3) .88

4) .08

5) 140

6) 2,000

7) 110

8) pounds

9) ounce

10) kilometer

11) $10\frac{4}{12} - 4\frac{3}{12} = 6\frac{1}{12}$

12) $6 - 1\frac{2}{3} = 5\frac{3}{3} - 1\frac{2}{3} = 4\frac{1}{3}$

13) $13\frac{6}{30} - 8\frac{25}{30} = 12\frac{36}{30} - 8\frac{25}{30} = 4\frac{11}{30}$

14) 1 x 1,000 = 1,000 g

15) 1,000 ÷ 1,000 = 1 kg

16) 1.1 x .5 = .55 pounds

17) 8 x 1,000 = 8,000

18) 7 - 2.3 = 4.7 min.

10A

1) done

2) done

3)

35. x .26	35 x 26	0 places + 2 places
210	210	
7.0	70	
9.10	9.10	2 places

4)

1.03 x .76	103 x 76	2 places + 2 places
.0618	618	
.721	721	
.7828	.7828	4 places

5)

4.7 x .6	47 x 6	1 place + 1 place
2.82	2.82	2 places

6)

.52 x .14	52 x 14	2 places + 2 places
.0208	208	
.052	52	
.0728	.0728	4 places

7)

200. x .08	200 x 08	0 places + 2 places
16.00	16.00	2 places

8)

5.28 x .12	528 x 12	2 places + 2 places
.1056	1056	
.528	528	
.6336	.6336	4 places

9) $6.55 x .4 = $2.62

10) $.96 x 2.5 = $2.40
(note: although we don't usually include an ending 0 in decimals, it is customary to include hundredths when we are referring to money.)

10B

1)	3.4	34	1 place	
	x .94	x 94	+ 2 places	
	.136	136		
	3.06	306		
	3.196	3.196	3 places	
2)	.73	73	2 places	
	x .48	x 48	+ 2 places	
	.0584	0584		
	.292	292		
	.3504	.3504	4 places	
3)	33.	33	0 places	
	x .42	x 42	+ 2 places	
	.66	66		
	13.2	132		
	13.86	13.86	2 places	
4)	5.19	519	2 places	
	x .81	x 81	+ 2 places	
	.0519	0519		
	4.152	4152		
	4.2039	4.2039	4 places	
5)	9.6	96	1 place	
	x .9	x 9	+ 1 place	
	8.64	8.64	2 places	
6)	.64	64	2 places	
	x .94	x 94	+ 2 places	
	.0256	256		
	.576	576		
	.6016	.6016	4 places	
7)	116.	116	0 places	
	x .02	x 02	+ 2 places	
	2.32	2.32	2 places	
8)	7.18	718	2 places	
	x .05	x 5	+ 2 places	
	.3590	.3590	4 places	

9) .15 x 100 = 15

10) .33 x 45 = 14.85

10C

1)	4.8	48	1 place
	x .71	x 71	+ 2 places
	.048	48	
	3.36	336	
	3.408	3.408	3 places
2)	.62	62	2 places
	x .37	x 37	+ 2 places
	.0434	434	
	.186	186	
	.2294	.2294	4 places
3)	69.	69	0 places
	x 2.3	x23	+ 1 place
	207	207	
	138	138	
	158.7	158.7	1 place
4)	9.97	997	2 places
	x.11	x 11	+ 2 places
	.0997	997	
	.997	997	
	1.0967	1.0967	4 places
5)	1.7	17	1 place
	x .4	x 4	+ 1 place
	.68	.68	2 places
6)	.16	16	2 places
	x .54	x 54	+ 2 places
	.0064	64	
	.080	80	
	.0864	.0864	4 places
7)	400.	400	0 places
	x .11	x 11	+ 2 places
	44.00	44.00	2 places
8)	6.73	673	2 places
	x .46	x 46	+ 2 places
	.4038	4038	
	2.692	2692	
	3.0958	3.0958	4 places

9) 4.25 x .75 = 3.1875

10) 2.45 x 5 = 12.25 meters

10D

1) 2.6 x .24 = .104 + .52 = .624 (1 place + 2 places = 3 places); 26 x 24 = 104 + 52 = 624

2) 35.91

3) .1408

4) .0335

5) 14,000

6) 50

7) .88

8) 1.18

9) 4.56

10) $4\frac{15}{20} + 2\frac{4}{20} = 6\frac{19}{20}$

11) $12\frac{4}{7} - 6\frac{1}{7} = 6\frac{3}{7}$

12) $5\frac{5}{50} + 3\frac{20}{50} = 8\frac{25}{50} = 8\frac{1}{2}$

13) $\frac{1}{\cancel{2}} \times \frac{\cancel{2}}{3} = \frac{1}{3}$

14) $\frac{\cancel{3}}{4} \times \frac{1}{\cancel{3}_{3}} = \frac{1}{12}$

15) $\frac{\cancel{3}}{8} \times \frac{1}{\cancel{2}} = \frac{3}{8}$

16) $\frac{\cancel{2}}{3} \times \frac{1}{\cancel{2}} = \frac{1}{3}$

Writing ones when canceling is optional.

17) .4 x 18 = 7.2

18) 55 x 2.2 = 121 pounds

10E

1) 11.9 x 5.3 = 357 + 595 = 6307 (1 place + 1 place = 2 places); 119 x 53 = 357 + 595 = 6307

2) .02

3) .7704

4) .2254

5) 1,700

6) 800,000

7) 9.77

8) 6.889

9) .045

10) $5\frac{12}{28} + 5\frac{7}{28} = 10\frac{19}{28}$

11) $2\frac{9}{72} - 1\frac{40}{72} = 1\frac{81}{72} - 1\frac{40}{72} = \frac{41}{72}$

12) $3\frac{1}{2} + 2\frac{1}{2} = 5\frac{2}{2} = 6$

13) $\frac{1}{2} \times \frac{3}{5} = \frac{3}{10}$

14) $\frac{3}{4} \times \frac{1}{7} = \frac{3}{28}$

15) $\frac{\cancel{2}}{5} \times \frac{7}{\cancel{10}_{5}} = \frac{14}{25}$

16) $\frac{3}{4} \quad \frac{6}{1} = \frac{\cancel{3}}{4} \times \frac{1}{\cancel{6}_{2}} = \frac{1}{8}$

17) $1\frac{8}{48} + 5\frac{18}{48} = 6\frac{26}{48} = 6\frac{13}{24}$

18) 2.5 x 36 = 90

19) 1.06 x 8 = 8.48

20) 34,000

10F

1) 9.35 x .5 = 4.675 (2 places + 1 place = 3 places); 935 x 5 = 4675

2) 79.21

3) 4.6063

4) .0986

5) 40

6) 30

7) .63

8) 5.032

9) 399.5

10) $6\frac{15}{30} + 8\frac{12}{30} = 14\frac{27}{30} = 14\frac{9}{10}$

11) $3 - 2\frac{1}{4} = 2\frac{4}{4} - 2\frac{1}{4} = \frac{3}{4}$

12) $7\frac{15}{50} + 9\frac{40}{50} = 16\frac{55}{50} = 17\frac{5}{50} = 17\frac{1}{10}$

13) $\frac{3}{\cancel{8}_{2}} \times \frac{\cancel{4}}{7} = \frac{3}{14}$

14) $\frac{1}{\cancel{2}} \times \frac{\cancel{8}^{4}}{9} = \frac{4}{9}$

15) $\frac{3}{5} \times \frac{3}{5} = \frac{9}{25}$

16) $\frac{\cancel{2}}{3} \times \frac{1}{\cancel{2}} = \frac{1}{3}$

17) $4 - 1\frac{2}{3} = 3\frac{3}{3} - 1\frac{2}{3} = 2\frac{1}{3}$

18) .2 x 56.4 = 11.28

19) 432 x .6 = 259.2

20) 4,000 meters

approximately 4,000 yards