A Story of Units®

Eureka Math[™] Grade 4, Module 5

Student File_B

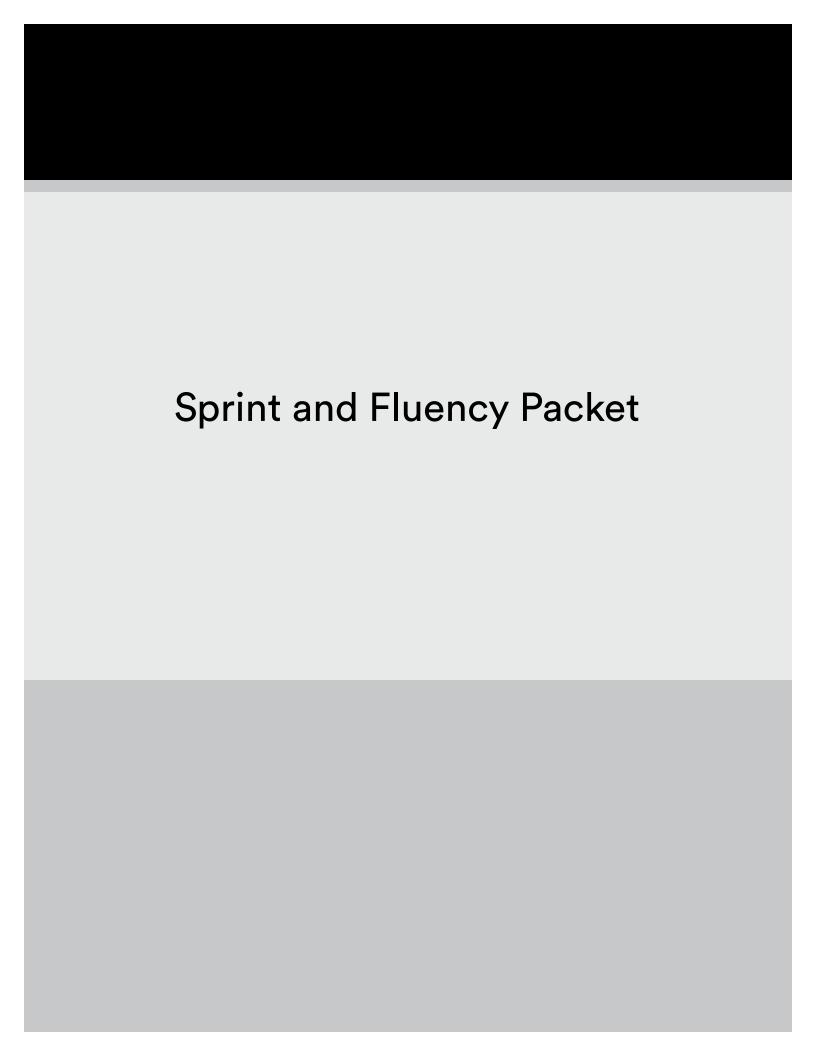
Contains Sprint and Fluency, Exit Ticket, and Assessment Materials

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10 9 8 7 6 5 4 3 2 1



A STORY OF UNITS

Number Correct: _____

Multiply Whole Numbers Times Fractions

1.	$\frac{1}{3} + \frac{1}{3} =$	
	$2 \times \frac{1}{3} =$	
2.		
3.	$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} =$	
4.	$3 \times \frac{1}{4} =$	
5.	$\frac{1}{5} + \frac{1}{5} =$	
6.	$2\times\frac{1}{5}=$	
7.	$\frac{1}{5} + \frac{1}{5} + \frac{1}{5} =$	
8.	$3 \times \frac{1}{5} =$	
9.	$\frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} =$	
10.	$4\times\frac{1}{5}=$	
11.	$\frac{1}{10} + \frac{1}{10} + \frac{1}{10} =$	
12.	$3 \times \frac{1}{10} =$	
13.	$\frac{1}{8} + \frac{1}{8} + \frac{1}{8} =$	
14.	$3 \times \frac{1}{8} =$	
15.	$\frac{1}{2} + \frac{1}{2} =$	
16.	$2 \times \frac{1}{2} =$	
17.	$\frac{1}{3} + \frac{1}{3} + \frac{1}{3} =$	
18.	$3 \times \frac{1}{3} =$	
19.	$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} =$	
20.	$4 \times \frac{1}{4} =$	
21.	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} =$	
22.	$3 \times \frac{1}{2} =$	

23.	$\frac{1}{3} + \frac{1}{3} + \frac{1}{3} + \frac{1}{3} =$	
24.	$4\times\frac{1}{3}=$	
25.	$\frac{5}{6} =$	× 1/6
26.	$\frac{5}{6} =$	5 × —
27.	$\frac{5}{8} =$	5 × —
28.	$\frac{5}{8} =$	× 1/8
29.	$\frac{7}{8} =$	7 × —
30.	$\frac{7}{10} =$	7 × —
31.	$\frac{7}{8} =$	× 1/8
32.	$\frac{7}{10} =$	× 1/10
33.	$\frac{6}{6}$ =	6 × —
34.	1 =	6 × —
35.	$\frac{8}{8}$ =	× 1/8
36.	1 =	× 1/8
37.	$9 \times \frac{1}{10} =$	
38.	$7 \times \frac{1}{5} =$	
39.	1 =	3 × —
40.	$7 \times \frac{1}{12} =$	
41.	1 =	× 1/5
42.	$\frac{\frac{3}{5}}{5} = $ $3 \times \frac{1}{4} =$	$\frac{1}{5} + \frac{1}{5} + \dots$ $- + \frac{1}{4} + \frac{1}{4}$
43.	$3 \times \frac{1}{4} =$	$-+\frac{1}{4}+\frac{1}{4}$
44.	1 =	-+-+-

Improvement: _____

Multiply Whole Numbers Times Fractions

1.	$\frac{1}{5} + \frac{1}{5} =$	
2.	$2\times\frac{1}{5}=$	
3.	$\frac{1}{3} + \frac{1}{3} =$	
4.	$2\times\frac{1}{3}=$	
5.	$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} =$	
6.	$3 \times \frac{1}{4} =$	
7.	$\frac{1}{5} + \frac{1}{5} + \frac{1}{5} =$	
8.	$3\times\frac{1}{5}=$	
9.	$\frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} =$	
10.	$4\times\frac{1}{5}=$	
11.	$\frac{1}{8} + \frac{1}{8} + \frac{1}{8} =$	
12.	$3 \times \frac{1}{8} =$	
13.	$\frac{1}{10} + \frac{1}{10} + \frac{1}{10} =$	
14.	$3 \times \frac{1}{10} =$	
15.	$\frac{1}{3} + \frac{1}{3} + \frac{1}{3} =$	
16.	$3 \times \frac{1}{3} =$	
17.	$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} =$	
18.	$4 \times \frac{1}{4} =$	
19.	$\frac{1}{2} + \frac{1}{2} =$	
20.	$2 \times \frac{1}{2} =$	
21.	$\frac{1}{3} + \frac{1}{3} + \frac{1}{3} + \frac{1}{3} =$	
22.	$4\times\frac{1}{3}=$	

23.	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} =$	
24.	$3 \times \frac{1}{2} =$	
25.	5/ ₆ =	× ¹ / ₆
26.	5/ ₆ =	5 × —
27.	5/8 =	5 × —
28.	$\frac{5}{8} =$ $\frac{7}{8} =$ $\frac{7}{10} =$	× 1/8
29.	$\frac{7}{8} =$	7 × —
30.	$\frac{7}{10} =$	7 × —
31.	$\frac{7}{8} =$	× 1/8
32.	$\frac{7}{10} =$	× 1/10
33.	\frac{8}{8} =	8 × —
34.	1 =	8 × —
35.	6/6 =	$\frac{1}{6}$ $\frac{1}{6}$
36.	1 =	× 1/6
37.	$5 \times \frac{1}{12} =$	
38.	$6 \times \frac{1}{5} =$	
39.	1 =	4 × —
40.	$9 \times \frac{1}{10} =$	
41.	1 =	× 1/3
42.	$\frac{3}{4} =$	$\frac{1}{4} + \frac{1}{4} + -$
43.	$3 \times \frac{1}{5} =$	$-+\frac{1}{5}+\frac{1}{5}$
44.	1 =	-+-+-+-

Subtract Fractions

1.	2 – 1 =	
2.	$\frac{2}{2} - \frac{1}{2} =$	
3.	$1 - \frac{1}{2} =$	
4.	3 – 1 =	
5.	$\frac{3}{3} - \frac{1}{3} =$	
6.	$1 - \frac{1}{3} =$	
7.	8 – 1 =	
8.	$\frac{8}{8} - \frac{1}{8} =$	
9.	$1 - \frac{1}{8} =$	
10.	5 – 1 =	
11.	$\frac{5}{5} - \frac{1}{5} =$	
12.	$\frac{\frac{5}{5} - \frac{1}{5}}{1 - \frac{1}{5}} =$ $1 - \frac{1}{5} =$	
13.	$1 - \frac{2}{5} =$	
14.	$1 - \frac{2}{5} =$ $1 - \frac{4}{5} =$	
15.	$1 - \frac{3}{5} =$	
16.	$1 - \frac{1}{4} =$	
17.	$1 - \frac{3}{4} =$	
18.	$1 - \frac{1}{10} =$	
19.	$1 - \frac{9}{10} =$	
20.	$1 - \frac{3}{10} =$	
21.	$1 - \frac{7}{10} =$	
22.	4 – 2 =	

23.	$\frac{4}{3} - \frac{2}{3} =$	
24.	$1\frac{1}{3} - \frac{2}{3} =$	
25.	$1\frac{2}{3} - \frac{1}{3} =$	
26.	7 – 4 =	
27.	$\frac{7}{5} - \frac{4}{5} =$	
28.	$1\frac{2}{5} - \frac{4}{5} =$	
29.	$1\frac{4}{5} - \frac{2}{5} =$	
30.	5 – 3 =	
31.	$\frac{5}{4} - \frac{3}{4} =$	
32.	$1\frac{1}{4} - \frac{3}{4} =$	
33.	$1\frac{3}{4} - \frac{1}{4} =$	
34.	$1 - \frac{3}{8} =$	
35.	$1 - \frac{7}{8} =$	
36.	$1\frac{7}{8} - \frac{3}{8} =$	
37.	$1\frac{3}{8} - \frac{7}{8} =$	
38.	$1 - \frac{1}{6} =$	
39.	$1 - \frac{5}{6} =$	
40.	$1\frac{5}{6} - \frac{1}{6} =$	
41.	$1\frac{1}{6} - \frac{5}{6} =$	
42.	$1 - \frac{5}{12} =$	
43.	$1\frac{1}{12} - \frac{7}{12} =$	
	4 13	

1.

Subtract Fractions

3 – 1 =

2. 3. 4. 2 - 1 = $\frac{2}{2} - \frac{1}{2} =$ 5. 6. 6 – 1 = 7. 8. 9. 10 – 1 = 10. $-\frac{1}{10} =$ 11. $1 - \frac{1}{10} =$ 12. $1 - \frac{2}{10} =$ 13. $1 - \frac{4}{10} =$ 14. $1 - \frac{3}{10} =$ 15. 16. 17.

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

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

5 - 3 =

Number Correct:	

Improvement: _____

23.	$\frac{5}{4} - \frac{3}{4} =$	
24.	$1\frac{1}{4} - \frac{3}{4} =$	
25.	$1\frac{3}{4} - \frac{1}{4} =$	
26.	8 – 4 =	
27.	$\frac{8}{5} - \frac{4}{5} =$	
28.	$1\frac{3}{5} - \frac{4}{5} =$	
29.	$1\frac{4}{5} - \frac{3}{5} =$	
30.	7 – 5 =	
31.	$\frac{7}{6} - \frac{5}{6} =$	
32.	$1\frac{1}{6} - \frac{5}{6} =$	
33.	$1\frac{5}{6} - \frac{1}{6} =$	
34.	$1 - \frac{5}{8} =$	
35.	$1 - \frac{7}{8} =$	
36.	$1\frac{7}{8} - \frac{5}{8} =$	
37.	$1\frac{5}{8} - \frac{7}{8} =$	
38.	$1 - \frac{1}{4} =$	
39.	$1 - \frac{3}{4} =$	
40.	$1\frac{3}{4} - \frac{1}{4} =$	
41.	$1\frac{1}{4} - \frac{3}{4} =$	
42.	$1 - \frac{7}{12} =$	
43.	$1\frac{1}{12} - \frac{5}{12} =$	
44.	$1\frac{7}{15} - \frac{11}{15} =$	



18.

19.

20.

21.

Add Fractions

1.	1+1=	
2.	$\frac{1}{5} + \frac{1}{5} =$	
3.	2 + 1 =	
4.	$\frac{2}{5} + \frac{1}{5} =$	
5.	2 + 2 =	
6.	$\frac{2}{5} + \frac{2}{5} =$	
7.	3 + 2 =	
8.	$\frac{3}{5} + \frac{2}{5} =$	fifths
9.	$\frac{5}{5} =$	
10.	$\frac{3}{5} + \frac{2}{5} =$	
11.	3 + 2 =	
12.	$\frac{3}{8} + \frac{2}{8} =$	
13.	3 + 2 + 2 =	
14.	$\frac{3}{8} + \frac{2}{8} + \frac{2}{8} =$	
15.	$\frac{3}{8} + \frac{3}{8} + \frac{2}{8} =$	eighths
16.	$\frac{8}{8} =$	
17.	$\frac{3}{8} + \frac{3}{8} + \frac{2}{8} =$	
18.	2 + 1 + 1 =	
19.	$\frac{2}{3} + \frac{1}{3} + \frac{1}{3} =$	thirds
20.	$\frac{2}{3} + \frac{1}{3} + \frac{1}{3} =$	1 - 3
21.	2 + 2 + 2 =	
22.	$\frac{2}{5} + \frac{2}{5} + \frac{2}{5} =$	fifths

23.	$\frac{2}{5} + \frac{2}{5} + \frac{2}{5} =$	1 _ 5
24.	3 + 3 + 3 =	
25.	$\frac{3}{8} + \frac{3}{8} + \frac{3}{8} =$	eighths
26.	$\frac{3}{8} + \frac{3}{8} + \frac{3}{8} =$	1 - 8
27.	$\frac{5}{8} + \frac{5}{8} + \frac{5}{8} =$	1 - 8
28.	1 + 1 + 1 =	
29.	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} =$	halves
30.	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} =$	1 - 2
31.	4 + 4 + 4 =	
32.	$\frac{4}{10} + \frac{4}{10} + \frac{4}{10} =$	tenths
33.	$\frac{4}{10} + \frac{4}{10} + \frac{4}{10} =$	1
34.	$\frac{6}{10} + \frac{6}{10} + \frac{6}{10} =$	1
35.	2 + 2 + 2 =	
36.	$\frac{2}{6} + \frac{2}{6} + \frac{2}{6} =$	sixths
37.	$\frac{2}{6} + \frac{2}{6} + \frac{2}{6} =$	
38.	$\frac{3}{6} + \frac{3}{6} + \frac{3}{6} =$	1 -
39.	$\frac{5}{12} + \frac{2}{12} + \frac{4}{12} =$	
40.	$\frac{4}{12} + \frac{4}{12} + \frac{4}{12} =$	
41.	$\frac{5}{12} + \frac{5}{12} + \frac{7}{12} =$	1
42.	$\frac{7}{12} + \frac{9}{12} + \frac{7}{12} =$	1
43.	$\frac{7}{15} + \frac{8}{15} + \frac{7}{15} =$	1
44.	$\frac{12}{15} + \frac{8}{15} + \frac{9}{15} =$	1 _

Add Fractions

Number Correct: _____ Improvement: _____

1 + 1 =	
$\frac{1}{6} + \frac{1}{6} =$	
3 + 1 =	
$\frac{3}{6} + \frac{1}{6} =$	
3 + 2 =	
$\frac{3}{6} + \frac{2}{6} =$	
4 + 2 =	
$\frac{4}{6} + \frac{2}{6} =$	sixths
$\frac{6}{6} =$	
$\frac{4}{6} + \frac{2}{6} =$	
5 + 2 =	
$\frac{5}{8} + \frac{2}{8} =$	
5 + 1 + 1 =	
$\frac{5}{8} + \frac{1}{8} + \frac{1}{8} =$	
$\frac{5}{8} + \frac{2}{8} + \frac{1}{8} =$	eighths
$\frac{8}{8} =$	
$\frac{3}{8} + \frac{3}{8} + \frac{2}{8} =$	
1+ 1 + 2 =	
$\frac{1}{3} + \frac{1}{3} + \frac{2}{3} =$	thirds
$\frac{1}{3} + \frac{1}{3} + \frac{2}{3} =$	1 - 3
3 + 3 + 3 =	
$\frac{3}{8} + \frac{3}{8} + \frac{3}{8} =$	eighths
	$\frac{1}{6} + \frac{1}{6} =$ $3 + 1 =$ $\frac{3}{6} + \frac{1}{6} =$ $3 + 2 =$ $\frac{3}{6} + \frac{2}{6} =$ $4 + 2 =$ $\frac{4}{6} + \frac{2}{6} =$ $\frac{4}{6} + \frac{2}{6} =$ $5 + 2 =$ $\frac{5}{8} + \frac{2}{8} =$ $5 + 1 + 1 =$ $\frac{5}{8} + \frac{1}{8} + \frac{1}{8} =$ $\frac{8}{8} =$ $\frac{3}{8} + \frac{3}{8} + \frac{2}{8} =$ $1 + 1 + 2 =$ $\frac{1}{3} + \frac{1}{3} + \frac{2}{3} =$ $\frac{1}{3} + \frac{1}{3} + \frac{2}{3} =$ $3 + 3 + 3 =$

23.	$\frac{3}{8} + \frac{3}{8} + \frac{3}{8} =$	1 -8
24.	1+1+1=	
25.	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} =$	halves
26.	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} =$	1 - 2
27.	2 + 2 + 2 =	
28.	$\frac{2}{5} + \frac{2}{5} + \frac{2}{5} =$	fifths
29.	$\frac{2}{5} + \frac{2}{5} + \frac{2}{5} =$	1 - 5
30.	$\frac{3}{5} + \frac{3}{5} + \frac{3}{5} =$	1 - 5
31.	6+6+6=	
32.	$\frac{6}{10} + \frac{6}{10} + \frac{6}{10} =$	tenths
33.	$\frac{6}{10} + \frac{6}{10} + \frac{6}{10} =$	1
34.	$\frac{5}{10} + \frac{5}{10} + \frac{5}{10} =$	1
35.	2 + 2 + 2 =	
36.	$\frac{2}{6} + \frac{2}{6} + \frac{2}{6} =$	sixths
37.	$\frac{2}{6} + \frac{2}{6} + \frac{2}{6} =$	
38.	$\frac{3}{6} + \frac{3}{6} + \frac{3}{6} =$	1 - 6
39.	$\frac{5}{12} + \frac{3}{12} + \frac{3}{12} =$	
40.	$\frac{5}{12} + \frac{5}{12} + \frac{2}{12} =$	
41.	$\frac{6}{12} + \frac{5}{12} + \frac{6}{12} =$	1
42.	$\frac{8}{12} + \frac{10}{12} + \frac{5}{12} =$	1 - 12
43.	$\frac{7}{15} + \frac{7}{15} + \frac{8}{15} =$	1 —
	$\frac{13}{15} + \frac{9}{15} + \frac{7}{15} =$	
37. 38. 39. 40. 41.	$\frac{2}{6} + \frac{2}{6} + \frac{2}{6} =$ $\frac{3}{6} + \frac{3}{6} + \frac{3}{6} =$ $\frac{5}{12} + \frac{3}{12} + \frac{3}{12} =$ $\frac{5}{12} + \frac{5}{12} + \frac{2}{12} =$ $\frac{6}{12} + \frac{5}{12} + \frac{6}{12} =$ $\frac{8}{12} + \frac{10}{12} + \frac{5}{12} =$ $\frac{7}{15} + \frac{7}{15} + \frac{8}{15} =$	$1{6}$ $1{12}$ $1{12}$

Change Fractions to Mixed Numbers

1.	3 = 2 +
2.	$\frac{3}{2} = \frac{2}{2} + {2}$
3.	$\frac{3}{2} = 1 + \frac{1}{2}$
4.	$\frac{3}{2}=1_{\frac{1}{2}}$
5.	5 = 4 +
6.	$\frac{5}{4} = \frac{4}{4} + {4}$
7.	$\frac{5}{4} = 1 + {4}$
8.	$\frac{5}{4} = 1 {4}$
9.	4 = + 1
10.	$\frac{4}{3} = \frac{1}{3} + \frac{1}{3}$
11.	$\frac{\frac{4}{3}}{3} = 1 + \frac{1}{3}$ $\frac{4}{3} = \frac{1}{3}$
12.	$\frac{4}{3} = \frac{1}{3}$
13.	7 = + 2
14.	$\frac{7}{5} = {5} + \frac{2}{5}$
15.	$\frac{7}{5} = 1 + \frac{1}{5}$
16.	$\frac{7}{5} = 1_{\frac{1}{5}}$
17.	$\frac{8}{5} = 1_{\frac{1}{5}}$
18.	$\frac{9}{5} = 1_{\frac{1}{5}}$
19.	$\frac{6}{5} = 1_{\frac{1}{5}}$
20.	$\frac{10}{5} =$
21.	$\frac{1}{5} = \frac{10}{5} + \frac{1}{5}$
22.	$\frac{1}{5} = 2 + \frac{1}{5}$

23.	$\frac{6}{3}$ =	
24.	$\frac{1}{3} = \frac{6}{3} + \frac{2}{3}$	
25.	$\frac{8}{3} = \frac{6}{3} + {3}$	
26.	$\frac{8}{3} = 2 + {3}$	
27.	$\frac{8}{3} = 2{3}$	
28.	$\frac{1}{4} = \frac{8}{4} + \frac{1}{4}$	
29.	$\frac{1}{4} = 2 + \frac{1}{4}$	
30.	$\frac{9}{4} = \underline{\qquad} \frac{1}{4}$	
31.	$\frac{11}{4} = \underline{\qquad} \frac{3}{4}$	
32.	$\frac{8}{3} = \frac{2}{3} + \frac{2}{3}$	
33.	$\frac{8}{3} = \frac{6}{3} + \frac{1}{3}$	
34.	$\frac{8}{3} = \frac{2}{3}$	
35.	$\frac{8}{3} = \frac{2}{3}$	
36.	$\frac{14}{5} = \frac{10}{5} + \frac{1}{5}$	
37.	$\frac{14}{5} = \underline{\qquad} + \frac{4}{5}$	
38.	$\frac{14}{5} = 2{5}$	
39.	$\frac{13}{5} = 2\frac{1}{5}$	
40.	$\frac{9}{8} = 1 + {8}$	
41.	$\frac{15}{8} = 1 + \frac{1}{8}$	
42.	$\frac{17}{12} = \frac{1}{12} + \frac{5}{12}$	
43.	$\frac{11}{8} = 1 + \frac{1}{8}$	
44.	$\frac{17}{12} = 1 + \frac{1}{12}$	

Change Fractions to Mixed Numbers

Number Correct: _____ Improvement: _____

Change Fractions to Mixed Numbers			
1.	6 = 5 +		
2.	$\frac{6}{5} = \frac{5}{5} + {5}$		
3.	$\frac{6}{5} = 1 + {5}$		
4.	$\frac{6}{5} = 1 {5}$		
5.	4 = 3 +		
6.	$\frac{4}{3} = \frac{3}{3} + {3}$		
7.	$\frac{4}{3} = 1 + \frac{1}{3}$		
8.	$\frac{4}{3}=1_{\overline{3}}$		
9.	5 = + 1		
10.	$\frac{5}{4} = \frac{1}{4} + \frac{1}{4}$		
11.	$\frac{5}{4} = 1 + \frac{1}{4}$		
12.	$\frac{5}{4} = \frac{1}{4}$		
13.	8 = + 3		
14.	$\frac{8}{5} = {5} + \frac{3}{5}$		
15.	$\frac{8}{5} = 1 + {5}$		
16.	$\frac{8}{5} = 1_{\frac{1}{5}}$		
17.	$\frac{9}{5} = 1{5}$		
18.	$\frac{6}{5} = 1 - \frac{1}{5}$		
19.	$\frac{7}{5} = 1{5}$		
20.	$\frac{6}{3}$ =		
21.	$\frac{1}{3} = \frac{6}{3} + \frac{1}{3}$		
22.	$\frac{1}{3} = 2 + \frac{1}{3}$		

23.	$\frac{4}{2} =$	
24.	$\frac{1}{2} = \frac{4}{2} + \frac{1}{2}$	
25.	$\frac{5}{2} = \frac{4}{2} + \frac{1}{2}$	
26.	$\frac{5}{2} = 2 + {2}$	
27.	$\frac{5}{2} = 2{2}$	
28.	$\frac{1}{5} = \frac{10}{5} + \frac{1}{5}$	
29.	$\frac{1}{5} = 2 + \frac{1}{5}$	
30.	$\frac{11}{5} = 2 + \frac{1}{5}$ $\frac{11}{5} = \frac{1}{5}$	
31.	$\frac{13}{5} = \frac{3}{5}$	
32.	$\frac{5}{3} = \frac{1}{3} + \frac{1}{3}$	
33.	$\frac{5}{2} = \frac{4}{2} + {2}$	
34.	$\frac{5}{2} = \underline{\qquad} + \frac{1}{2}$	
35.	$\frac{5}{2} = \frac{1}{2}$	
36.	$\frac{12}{5} = \frac{10}{5} + \frac{1}{5}$ $\frac{12}{5} = \frac{1}{5} + \frac{2}{5}$	
37.	$\frac{12}{5} = + \frac{2}{5}$	
38.	$\frac{12}{5} = 2{5}$	
39.	$\frac{14}{5} = 2{5}$	
40.	$\frac{9}{8} = 1 + {8}$	
41.	$\frac{11}{8} = 1 + \frac{1}{8}$	
42.	$\frac{19}{12} = \frac{1}{12} + \frac{7}{12}$	
43.	$\frac{15}{8} = 1 + \frac{1}{8}$	
44.	$\frac{19}{12} = 1 + \frac{1}{12}$	

Change Fractions to Mixed Numbers

1.	3 + 1 =
2.	$\frac{3}{3} + \frac{1}{3} = \frac{1}{3}$
3.	$1 + \frac{1}{3} = \frac{1}{3}$
4.	$1\frac{1}{3} = \frac{1}{3}$
5.	5 + 1 =
6.	$\frac{5}{5} + \frac{1}{5} = \frac{1}{5}$
7.	$1 + \frac{1}{5} = \frac{1}{5}$
8.	$1\frac{1}{5} = \frac{1}{5}$
9.	2 + 1 =
10.	$\frac{2}{2} + \frac{1}{2} = \frac{1}{2}$
11.	$1 + \frac{1}{2} = \frac{1}{2}$
12.	$1\frac{1}{2}=\frac{1}{2}$
13.	$\frac{4}{4} + \frac{1}{4} = \frac{1}{4}$
14.	$1 + \frac{1}{4} = \frac{1}{4}$
15.	$1\frac{1}{4} = \frac{1}{4}$
16.	$1\frac{3}{4} = {4}$
17.	$\frac{5}{5} + \frac{1}{5} = \frac{1}{5}$
18.	$1 + \frac{1}{5} = \frac{1}{5}$
19.	$1\frac{1}{5} = \frac{1}{5}$
20.	$1\frac{3}{5} = {5}$
21.	$\frac{8}{8} + \frac{3}{8} = \frac{1}{8}$
22.	$1 + \frac{3}{8} = {8}$

23.	$1\frac{3}{8} = \frac{1}{8}$
24.	$2 + \frac{1}{3} = 2 - \frac{1}{3}$
25.	$\frac{6}{3} + \frac{1}{3} = \frac{1}{3}$
26.	$2 + \frac{1}{3} = \frac{1}{3}$
27.	$2\frac{1}{3} = \frac{1}{3}$
28.	$2 + \frac{1}{5} = 2 - \frac{1}{5}$
29.	$\frac{10}{5} + \frac{1}{5} = \frac{1}{5}$
30.	$2 + \frac{1}{5} = \frac{1}{5}$
31.	$2\frac{1}{5} = \frac{1}{5}$
32.	$\frac{8}{4} + \frac{3}{4} = {4}$
33.	$2 + \frac{3}{4} = {4}$
34.	$2\frac{3}{4} = \frac{1}{4}$
35.	$\frac{12}{3} + \frac{2}{3} = \frac{1}{3}$
36.	$4 + \frac{2}{3} = \frac{1}{3}$
37.	$4\frac{2}{3} = \frac{1}{3}$
38.	$3 + \frac{3}{5} = {5}$
39.	$3 + \frac{1}{2} = \frac{1}{2}$
40.	$4 + \frac{3}{4} = {4}$
41.	$2 + \frac{1}{6} = \frac{1}{6}$
42.	$2 + \frac{5}{8} = {8}$
43.	$2\frac{4}{5} = \frac{1}{5}$
44.	$3\frac{7}{8} = \frac{1}{8}$

Improvement: _____

Change Fractions to Mixed Numbers

1.	4 + 1 =
2.	$\frac{4}{4} + \frac{1}{4} = \frac{1}{4}$
3.	$1 + \frac{1}{4} = \frac{1}{4}$
4.	$1\frac{1}{4} = \frac{1}{4}$
5.	2 + 1 =
6.	$\frac{2}{2} + \frac{1}{2} = \frac{1}{2}$
7.	$1 + \frac{1}{2} = \frac{1}{2}$
8.	$1\frac{1}{2} = \frac{1}{2}$
9.	5 + 1 =
10.	$\frac{5}{5} + \frac{1}{5} = \frac{1}{5}$
11.	$1 + \frac{1}{5} = \frac{1}{5}$
12.	$1\frac{1}{5} = \frac{1}{5}$
13.	$\frac{3}{3} + \frac{1}{3} = \frac{1}{3}$
14.	$1 + \frac{1}{3} = \frac{1}{3}$
15.	$1\frac{1}{3} = \frac{1}{3}$
16.	$1\frac{2}{3} = \frac{1}{3}$
17.	$\frac{10}{10} + \frac{1}{10} = \frac{1}{10}$
18.	$1 + \frac{1}{10} = \frac{1}{10}$
19.	$1\frac{1}{10} = \frac{1}{10}$
20.	$1\frac{7}{10} = \frac{1}{10}$
21.	$\frac{8}{8} + \frac{5}{8} = {8}$
22.	$1 + \frac{5}{8} = {8}$

	p.ove	
23.	$1\frac{5}{8} = \frac{1}{8}$	
24.	$2 + \frac{1}{2} = 2 - \frac{1}{2}$	
25.	$\frac{4}{2} + \frac{1}{2} = \frac{1}{2}$	
26.	$2 + \frac{1}{2} = \frac{1}{2}$	
27.	$2\frac{1}{2} = \frac{1}{2}$	
28.	$2 + \frac{1}{4} = 2 \frac{1}{4}$	
29.	$\frac{8}{4} + \frac{1}{4} = {4}$	
30.	$2 + \frac{1}{4} = \frac{1}{4}$	
31.	$2\frac{1}{4} = \frac{1}{4}$	
32.	$\frac{6}{3} + \frac{2}{3} = {3}$	
33.	$2 + \frac{2}{3} = {3}$	
34.	$2\frac{2}{3} = \frac{2}{3}$	
35.	$\frac{12}{4} + \frac{3}{4} = \frac{1}{4}$	
36.	$3 + \frac{3}{4} = {4}$	
37.	$3\frac{3}{4} = \frac{1}{4}$	
38.	$3 + \frac{4}{5} = {5}$	
39.	$4 + \frac{1}{2} = \frac{1}{2}$	
40.	$4 + \frac{2}{3} = {3}$	
41.	$3 + \frac{1}{6} = \frac{1}{6}$	
42.	$2 + \frac{7}{8} = {8}$	
43.	$2\frac{3}{5} = \frac{3}{5}$	

 $2\frac{7}{8} = \frac{}{8}$

Change Mixed Numbers to Fractions

1.	2 + 1 =
2.	$\frac{2}{2} + \frac{1}{2} = \frac{1}{2}$
3.	$1 + \frac{1}{2} = \frac{1}{2}$
4.	$1\frac{1}{2} = \frac{1}{2}$
5.	2 2 4+1=
6.	$\frac{4}{4} + \frac{1}{4} = \frac{1}{4}$
7.	$ \begin{array}{ccccccccccccccccccccccccccccccccc$
8.	$1\frac{1}{4} = \frac{1}{4}$
9.	3 + 1 =
10.	$\frac{3}{3} + \frac{1}{3} = \frac{1}{3}$
11.	$1 + \frac{1}{3} = \frac{1}{3}$
12.	$1\frac{1}{3} = \frac{1}{3}$
13.	$\frac{5}{5} + \frac{1}{5} = \frac{1}{5}$
14.	$1 + \frac{1}{5} = \frac{1}{5}$
15.	$1\frac{1}{5} = \frac{1}{5}$
16.	$1\frac{2}{5} = \frac{1}{5}$
17.	$1\frac{4}{5} = {5}$
18.	$1\frac{3}{5} = {5}$
19.	$\frac{4}{4} + \frac{3}{4} = \frac{1}{4}$
20.	$1 + \frac{3}{4} = {4}$
21.	$\frac{6}{6} + \frac{5}{6} = \frac{1}{6}$
22.	$1 + \frac{5}{6} = \frac{1}{6}$

23.	$1\frac{5}{6} = \frac{1}{6}$	
24.	$2 + \frac{1}{2} = 2 - \frac{1}{2}$	
25.	$\frac{4}{2} + \frac{1}{2} = \frac{1}{2}$	
26.	$2 + \frac{1}{2} = \frac{1}{2}$	
27.	$2\frac{1}{2} = \frac{1}{2}$	
28.	$2 + \frac{1}{4} = 2 - \frac{1}{4}$	
29.	$\frac{8}{4} + \frac{1}{4} = \frac{1}{4}$	
30.	$2 + \frac{1}{4} = \frac{1}{4}$	
31.	$2\frac{1}{4} = \frac{1}{4}$	
32.	$\frac{9}{3} + \frac{2}{3} = {3}$	
33.	$3 + \frac{2}{3} = {3}$	
34.	$3\frac{2}{3} = \frac{1}{3}$	
35.	$\frac{16}{4} + \frac{3}{4} = {4}$	
36.	$4 + \frac{3}{4} = {4}$	
37.	$4\frac{3}{4} = \frac{3}{4}$	
38.	$3 + \frac{2}{5} = \frac{1}{5}$	
39.	$4+\frac{1}{2}={2}$	
40.	$3 + \frac{3}{4} = {4}$	
41.	$3 + \frac{1}{6} = \frac{1}{6}$	
42.	$3 + \frac{5}{8} = {8}$	
43.	$3\frac{4}{5} = \frac{1}{5}$	
	7	

Improvement: _____

Change Mixed Numbers to Fractions

1.	5 + 1 =
2.	$\frac{5}{5} + \frac{1}{5} = {5}$
3.	$1 + \frac{1}{5} = \frac{1}{5}$
4.	$1\frac{1}{5} = \frac{1}{5}$
5.	3 + 1 =
6.	$\frac{3}{3} + \frac{1}{3} = \frac{1}{3}$
7.	$1 + \frac{1}{3} = \frac{1}{3}$
8.	$1\frac{1}{3} = \frac{1}{3}$
9.	4 + 1 =
10.	$\frac{4}{4} + \frac{1}{4} = \frac{1}{4}$
11.	$1 + \frac{1}{4} = \frac{1}{4}$
12.	$1\frac{1}{4} = \frac{1}{4}$
13.	$\frac{10}{10} + \frac{1}{10} = \frac{1}{10}$
14.	$1 + \frac{1}{10} = \frac{1}{10}$
15.	$1\frac{1}{10} = \frac{1}{10}$
16.	$1\frac{2}{10} = \frac{1}{10}$
17.	$1\frac{4}{10} = \frac{1}{10}$
18.	$1\frac{3}{10} = \frac{3}{10}$
19.	$\frac{3}{3} + \frac{2}{3} = {3}$
20.	$1 + \frac{2}{3} = \frac{1}{3}$
21.	$\frac{8}{8} + \frac{7}{8} = \frac{1}{8}$
22.	$1 + \frac{7}{8} = {8}$

23.	$1\frac{7}{8} = \frac{1}{8}$	
24.	$2 + \frac{1}{2} = 2 - \frac{1}{2}$	
25.	$\frac{4}{2} + \frac{1}{2} = \frac{2}{2}$	
26.	$2 + \frac{1}{2} = \frac{1}{2}$	
27.	$2\frac{1}{2} = \frac{1}{2}$	
28.	$2 + \frac{1}{3} = 2 - \frac{1}{3}$	
29.	$\frac{6}{3} + \frac{1}{3} = {3}$	
30.	$2 + \frac{1}{3} = \frac{1}{3}$	
31.	$2\frac{1}{3}=\frac{1}{3}$	
32.	$\frac{12}{4} + \frac{3}{4} = \frac{1}{4}$	
33.	$3 + \frac{3}{4} = {4}$	
34.	$3\frac{3}{4} = {4}$	
35.	$\frac{12}{3} + \frac{2}{3} = \frac{1}{3}$	
36.	$4+\frac{2}{3}={3}$	
37.	$4\frac{2}{3}=\frac{1}{3}$	
38.	$3 + \frac{3}{5} = {5}$	
39.	$5 + \frac{1}{2} = \frac{1}{2}$	
40.	$3 + \frac{2}{3} = \frac{1}{3}$	
41.	$3 + \frac{1}{8} = \frac{1}{8}$	
42.	$3 + \frac{1}{6} = \frac{1}{6}$	
43.	$3\frac{2}{5} = \frac{1}{5}$	

 $4\frac{5}{6} = \frac{}{6}$

Change Mixed Numbers to Fractions

1.	4 = 3 +
2.	$\frac{4}{3} = \frac{3}{3} + {3}$
3.	$\frac{4}{3} = 1 + \frac{1}{3}$
4.	$\frac{4}{3} = 1 {3}$
5.	6 = 5 +
6.	$\frac{6}{5} = \frac{5}{5} + {5}$
7.	$\frac{6}{5} = 1 + {5}$
8.	$\frac{6}{5} = 1 - \frac{1}{5}$
9.	5 = + 1
10.	$\frac{5}{4} = \frac{1}{4} + \frac{1}{4}$
11.	$\frac{5}{4} = 1 + \frac{1}{4}$
12.	$\frac{5}{4} = \underline{\qquad} \frac{1}{4}$
13.	8 = + 3
14.	$\frac{8}{5} = {5} + \frac{3}{5}$
15.	$\frac{8}{5} = 1 + {5}$
16.	$\frac{8}{5} = 1_{\frac{1}{5}}$
17.	$\frac{7}{5} = 1_{\frac{1}{5}}$
18.	$\frac{6}{5} = 1{5}$
19.	$\frac{9}{5} = 1_{\frac{1}{5}}$
20.	$\frac{10}{5} =$
21.	$\frac{1}{5} = \frac{10}{5} + \frac{4}{5}$
22.	$\frac{1}{5} = 2 + \frac{4}{5}$

23.	$\frac{8}{4} =$
24.	$\frac{1}{4} = \frac{8}{4} + \frac{3}{4}$
25.	$\frac{11}{4} = \frac{8}{4} + {4}$
26.	$\frac{11}{4} = 2 + \frac{1}{4}$
27.	$\frac{11}{4} = 2 \frac{1}{4}$
28.	$\frac{1}{3} = \frac{6}{3} + \frac{1}{3}$
29.	$\frac{1}{3} = 2 + \frac{1}{3}$
30.	$\frac{1}{3} = 2 + \frac{1}{3}$ $\frac{7}{3} = \frac{1}{3}$
31.	$\frac{8}{3} = \frac{2}{3}$
32.	$\frac{17}{5} = \frac{1}{5} + \frac{2}{5}$
33.	$\frac{17}{5} = \frac{15}{5} + \frac{1}{5}$
34.	$\frac{17}{5} = + \frac{2}{5}$
35.	$\frac{17}{5} = \frac{2}{5}$
36.	$\frac{13}{6} = \frac{12}{6} + \frac{1}{6}$
37.	$\frac{13}{6} = \underline{\qquad} + \frac{1}{6}$
38.	$\frac{13}{6} = 2{6}$
39.	$\frac{17}{6} = 2{6}$
40.	$\frac{9}{8} = 1 + {8}$
41.	$\frac{13}{8} = 1 + \frac{1}{8}$
42.	$\frac{19}{10} = 1 + \frac{1}{10}$
43.	$\frac{19}{12} = \frac{1}{12} + \frac{7}{12}$
44.	$\frac{11}{6} = 1 + \frac{1}{6}$

Change Mixed Numbers to Fractions

Number Correct: _____ Improvement: _____

1.	5 = 4 +
2.	$\frac{5}{4} = \frac{4}{4} + \frac{1}{4}$
3.	$\frac{5}{4} = 1 + {4}$
4.	$\frac{5}{4} = 1 - \frac{1}{4}$
5.	3 = 2 +
6.	$\frac{3}{2} = \frac{2}{2} + \frac{1}{2}$
7.	$\frac{3}{2} = 1 + \frac{1}{2}$
8.	$\frac{3}{2} = 1 - \frac{1}{2}$
9.	9 = + 1
10.	$\frac{9}{8} = \frac{1}{8} + \frac{1}{8}$
11.	$\frac{9}{8} = 1 + {8}$
12.	$\frac{9}{8} = \frac{1}{8}$
13.	9 = + 4
14.	$\frac{9}{5} = {5} + \frac{4}{5}$
15.	$\frac{9}{5} = 1 + {5}$
16.	$\frac{9}{5} = 1{5}$
17.	$\frac{8}{5} = 1{5}$
18.	$\frac{7}{5} = 1{5}$
19.	$\frac{6}{5} = 1{5}$
20.	$\frac{8}{4} =$
21.	$\frac{1}{4} = \frac{8}{4} + \frac{1}{4}$
22.	$\frac{1}{4} = 2 + \frac{1}{4}$

23.	$\frac{6}{3} =$	
24.	$\frac{1}{3} = \frac{6}{3} + \frac{2}{3}$	
25.	$\frac{8}{3} = \frac{6}{3} + {3}$	
26.	$\frac{8}{3} = 2 + {3}$	
27.	$\frac{8}{3} = 2{3}$	
28.	$\frac{1}{10} = \frac{20}{10} + \frac{1}{10}$	
29.	$\frac{10}{10} = 2 + \frac{1}{10}$	
30.	$\frac{1}{10} = 2 + \frac{1}{10}$ $\frac{21}{10} = \frac{1}{10}$	
31.	$\frac{27}{10} = \frac{7}{10}$	
32.	$\frac{13}{6} = \frac{1}{6} + \frac{1}{6}$	
33.	$\frac{13}{6} = \frac{12}{6} + \frac{1}{6}$	
34.	$\frac{13}{6} = \underline{\qquad} + \frac{1}{6}$	
35.	$\frac{13}{6} = \frac{1}{6}$	
36.	$\frac{17}{8} = \frac{16}{8} + \frac{1}{8}$	
37.	$\frac{17}{8} = \frac{1}{8} + \frac{1}{8}$	
38.	$\frac{17}{8} = 2{8}$	
39.	$\frac{21}{8} = 2{8}$	
40.	$\frac{7}{6} = 1 + \frac{1}{6}$	
41.	$\frac{11}{6} = 1 + \frac{1}{6}$	
42.	$\frac{13}{5} = 2 + \frac{1}{5}$	
43.	$\frac{17}{12} = \frac{1}{12} + \frac{5}{12}$	
44.	$\frac{13}{8} = 1 + \frac{1}{8}$	

Number Correct:

A

Multiply Whole Numbers Times Fractions

1.	$\frac{1}{3} + \frac{1}{3} =$	
2.	$2\times\frac{1}{3}=$	
3.	$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} =$	
4.	$3 \times \frac{1}{4} =$	
5.	$\frac{1}{5} + \frac{1}{5} =$	
6.	$2\times\frac{1}{5}=$	
7.	$\frac{1}{5} + \frac{1}{5} + \frac{1}{5} =$	
8.	$3 \times \frac{1}{5} =$	
9.	$\frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} =$	
10.	$4\times\frac{1}{5}=$	
11.	$\frac{1}{10} + \frac{1}{10} + \frac{1}{10} =$	
12.	$3 \times \frac{1}{10} =$	
13.	$\frac{1}{8} + \frac{1}{8} + \frac{1}{8} =$	
14.	$3 \times \frac{1}{8} =$	
15.	$\frac{1}{2} + \frac{1}{2} =$	
16.	$2 \times \frac{1}{2} =$	
17.	$\frac{1}{3} + \frac{1}{3} + \frac{1}{3} =$	
18.	$3 \times \frac{1}{3} =$	
19.	$\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} =$	
20.	$4\times\frac{1}{4}=$	
21.	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} =$	
22.	$3 \times \frac{1}{2} =$	

23.	$\frac{1}{3} + \frac{1}{3} + \frac{1}{3} + \frac{1}{3} =$	
24.	$4\times\frac{1}{3}=$	
25.	5 6	× 1/6
26.	5 = 6	5 × —
27.	5 =	5 × —
28.	⁵ / ₈ =	× 1/8
29.	$\frac{7}{8} =$	7 × —
30.	$\frac{7}{10} =$	7 × —
31.	$\frac{7}{8} =$	× 1/8
32.	$\frac{7}{10} =$	× 1/10
33.	$\frac{6}{6} =$	6 × —
34.	1 =	6 × —
35.	$\frac{8}{8} =$	× 1/8
36.	1 =	× 1/8
37.	$9 \times \frac{1}{10} =$	
38.	$7 \times \frac{1}{5} =$	
39.	1 =	3 × —
40.	$7 \times \frac{1}{12} =$	
41.	1 =	× 1/5
42.	$\frac{3}{5} =$	$\frac{1}{5} + \frac{1}{5} + -$
43.	$3 \times \frac{1}{4} =$	$-+\frac{1}{4}+\frac{1}{4}$
44.	1 =	-+-+-

B

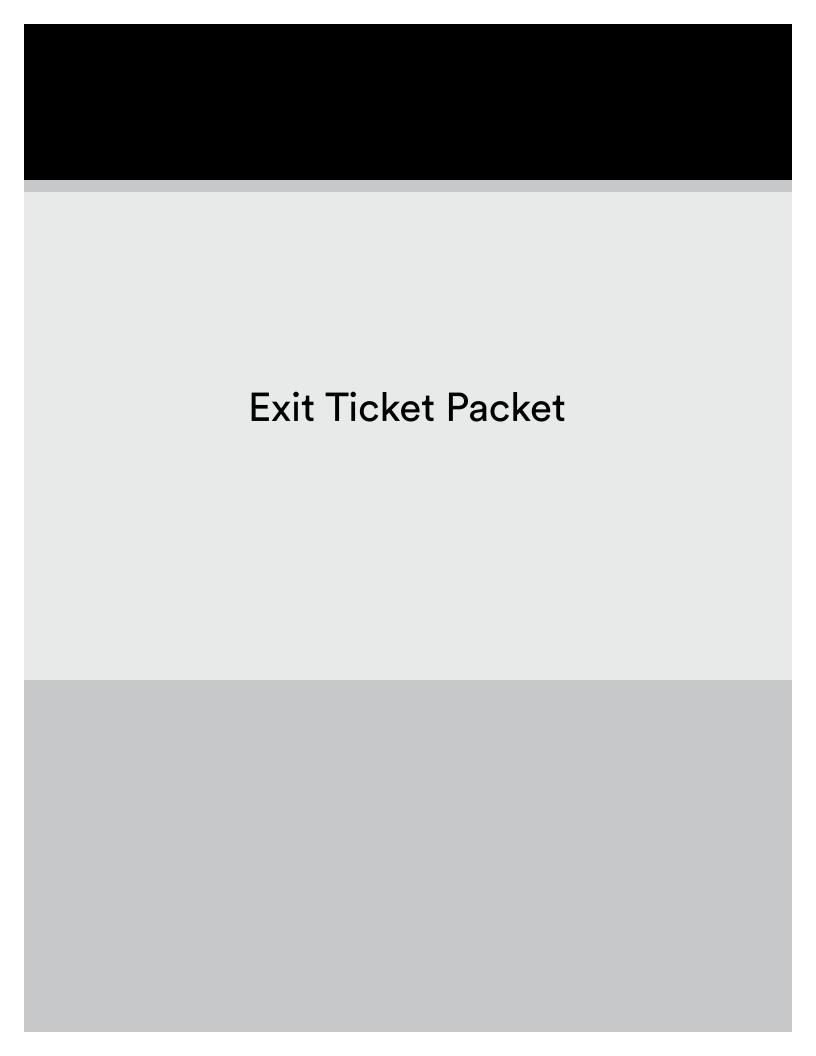
Multiply Whole Numbers Times Fractions

1. 2. 3. 4. $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} =$ 5. 6. 7. 8. 9. 10. 11. $3 \times \frac{1}{8} =$ 12. 13. $3 \times \frac{1}{10} =$ 14. $\frac{1}{3} + \frac{1}{3} + \frac{1}{3} =$ 15. $3 \times \frac{1}{3} =$ 16. $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} =$ 17. 18. 19. $2 \times \frac{1}{2} =$ 20. $\frac{1}{3} + \frac{1}{3} + \frac{1}{3} + \frac{1}{3} =$ 21. $4 \times \frac{1}{3} =$

	_	
Number	Correct	
Nullibel	COLLECT.	

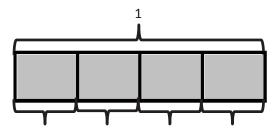
Improvement: _____

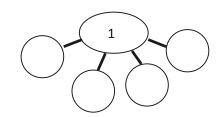
23.	$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} =$	
24.	$3 \times \frac{1}{2} =$	
25.	5 ₆ =	× 1/6
26.	$\frac{5}{6} =$	5 × —
27.	⁵ / ₈ =	5 × —
28.	$\frac{5}{8} =$	× 1/8
29.	7 / ₈ =	7 × —
30.	$\frac{7}{10} =$	7 × —
31.	$\frac{7}{8} =$	× 1/8
32.	$\frac{7}{10} =$	× 1/10
33.	8/8 =	8 × —
34.	1 =	8 × —
35.	$\frac{6}{6} =$	× 1/6
36.	1 =	× 1/6
37.	$5 \times \frac{1}{12} =$	
38.	$6 \times \frac{1}{5} =$	
39.	1 =	4 × —
40.	$9 \times \frac{1}{10} =$	
41.	1 =	× 1/3
42.	$\frac{3}{4} =$	$\frac{1}{4} + \frac{1}{4} + \cdots$
43.	$3 \times \frac{1}{5} =$	$-+\frac{1}{5}+\frac{1}{5}$
44.	1 =	-+-+-+



Date _____

1. Complete the number bond, and write the number sentence to match the tape diagram.





2. Draw and label tape diagrams to model each number sentence.

a.
$$1 = \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5}$$

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

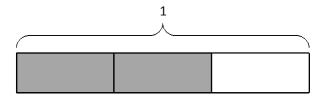
Name	Date
Step 1:	Draw and shade a tape diagram of the given fraction.
Step 2:	Record the decomposition of the fraction in three different ways using number sentences.
4	



Date _____ Name _____

1. Decompose each fraction modeled by a tape diagram as a sum of unit fractions. Write the equivalent multiplication sentence.

a.

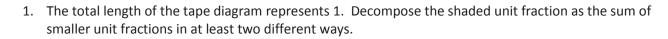


b.

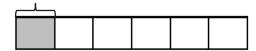


2. Draw a tape diagram, and record the given fraction's decomposition into unit fractions as a multiplication sentence.

6 9





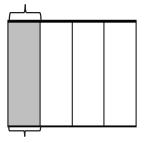


2. Draw a tape diagram to prove the following statement.

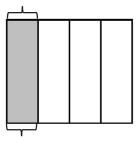
$$\frac{2}{3} = \frac{4}{6}$$

Name	Date	

- 1. Draw horizontal lines to decompose each rectangle into the number of rows as indicated. Use the model to give the shaded area as both a sum of unit fractions and as a multiplication sentence.
 - a. 2 rows



b. 3 rows

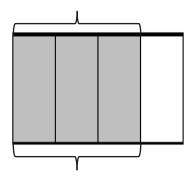


2. Draw an area model to show the decomposition represented by the number sentence below. Represent the decomposition as a sum of unit fractions and as a multiplication sentence.

$$\frac{3}{5} = \frac{6}{10}$$

|--|

1. The rectangle below represents 1. Draw horizontal lines to decompose the rectangle into eighths. Use the model to give the shaded area as a sum and as a product of unit fractions. Use parentheses to show the relationship between the number sentences.



2. Draw an area model to show the decomposition represented by the number sentence below.

$$\frac{4}{5} = \frac{8}{10}$$



Name Date	
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Draw two different area models to represent 1 fourth by shading. Decompose the shaded fraction into (a) eighths and (b) twelfths. Use multiplication to show how each fraction is equivalent to 1 fourth.

a.

b.



Date _____

1. Use multiplication to create an equivalent fraction for the fraction below.

2 <u>-</u>5

2. Determine if the following is a true number sentence. If needed, correct the statement by changing the right-hand side of the number sentence.



Name _		Date	
a.	In the first area model, show 2 sixths. In the second area model, show 4 twelfths. Show how fractions can be composed, or renamed, as the same unit fraction.		v how both

b. Express the equivalent fractions in a number sentence using division.



Name	Date	

Draw an area model to show why the fractions are equivalent. Show the equivalence in a number sentence using division.

$$\frac{4}{10} = \frac{2}{5}$$



Name	Date	
Ivallie	Date	

1. Partition a number line from 0 to 1 into sixths. Decompose $\frac{2}{6}$ into 4 equal lengths.

2. Write a number sentence using multiplication to show what fraction represented on the number line is equivalent to $\frac{2}{6}$.

3. Write a number sentence using division to show what fraction represented on the number line is equivalent to $\frac{2}{6}$.



1

Date _____

- 1. Plot the following points on the number line without measuring.
 - a. $\frac{8}{10}$

b. $\frac{3}{5}$

c. $\frac{1}{4}$

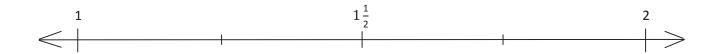


- 2. Use the number line in Problem 1 to compare the fractions by writing >, <, or = on the lines.
 - a. $\frac{1}{4}$ $\frac{1}{2}$
 - b. $\frac{8}{10} = \frac{3}{5}$
 - C. $\frac{1}{2}$ $\frac{3}{5}$
 - d. $\frac{1}{4}$ $\frac{8}{10}$

Date _____

- 1. Place the following fractions on the number line given.
 - a. $\frac{5}{4}$

- b. $\frac{10}{7}$
- c. $\frac{16}{9}$



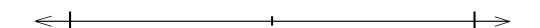
- 2. Compare the fractions using >, <, or =.
 - a. $\frac{5}{4}$ b. $\frac{5}{4}$ c. $\frac{16}{9}$ c. $\frac{16}{9}$

Date _____

1. Draw tape diagrams to compare the following fractions:

 $\frac{3}{10}$

2. Use a number line to compare the following fractions:



Name	Date	
_		

Draw an area model for each pair of fractions, and use it to compare the two fractions by writing >, <, or = on the line.

1. $\frac{3}{4}$ — $\frac{4}{5}$

2. $\frac{2}{6}$ $\frac{3}{5}$



1. Solve. Use a number bond to decompose the difference. Record your final answer as a mixed number.

$$\frac{16}{9} - \frac{5}{9}$$

2. Solve. Use a number bond to decompose the sum. Record your final answer as a mixed number.

$$\frac{5}{12} + \frac{10}{12}$$



Name	Date	

1. Solve. Model the problem with a number line, and solve by both counting up and subtracting.

$$1-\frac{2}{5}$$

2. Find the difference in two ways. Use a number bond to show the decomposition.

$$1\frac{2}{7} - \frac{5}{7}$$



Date _____

Solve the following problems. Use number bonds to help you.

1.
$$\frac{5}{9} + \frac{2}{9} + \frac{4}{9}$$

2.
$$1 - \frac{5}{8} - \frac{1}{8}$$



Name	Date	

Use the RDW process to solve.

1. Mrs. Smith took her bird to the vet. Tweety weighed $1\frac{3}{10}$ pounds. The vet said that Tweety weighed $\frac{4}{10}$ pound more last year. How much did Tweety weigh last year?

2. Hudson picked $1\frac{1}{4}$ baskets of apples. Suzy picked 2 baskets of apples. How many more baskets of apples did Suzy pick than Hudson?



Name	Data	
Ivallie	Date	

1. Draw a number line to model the addition. Solve, and then write a complete number sentence.

$$\frac{5}{8} + \frac{2}{4}$$

2. Solve without drawing a model.

$$\frac{3}{4} + \frac{1}{2}$$

vanic Datc

Solve. Write a complete number sentence. Use a number bond to write each sum as a mixed number. Use a model if needed.

1.
$$\frac{1}{4} + \frac{7}{8}$$

2.
$$\frac{2}{3} + \frac{7}{12}$$



Name	Date	

Complete the subtraction sentences using number bonds. Draw a model if needed.

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

2.
$$8 - \frac{5}{6} =$$

3.
$$7 - \frac{5}{8} =$$



Nieros	Data
Name	Date

Multiply and write the product as a mixed number. Draw a number line to support your answer.

1.
$$8 \times \frac{1}{2}$$

2. 7 copies of 1 fourth

3.
$$13 \times \frac{1}{3}$$



Name	_ Date	

1. Rename the fraction as a mixed number by decomposing it into two parts. Model the decomposition with a number line and a number bond.

 $\frac{17}{5}$

2. Convert the fraction to a mixed number. Model with a number line.

3. Convert the fraction to a mixed number.



Date _____

Convert each mixed number to a fraction greater than 1.

1. $3\frac{1}{5}$

2. $2\frac{3}{5}$

3. $4\frac{2}{9}$



Name	Date
Traine	

Compare the fractions given below by writing >, <, or =.

Give a brief explanation for each answer, referring to benchmark fractions.

1.
$$3\frac{2}{3}$$
 3 $\frac{4}{6}$

2.
$$\frac{12}{3}$$
 $\frac{27}{7}$

3.
$$\frac{10}{6}$$
 $\frac{5}{4}$

4.
$$3\frac{2}{5}$$
 3 $\frac{3}{10}$



Date _____

Compare each pair of fractions using >, <, or = using any strategy.

1.
$$4\frac{3}{8}$$
 _____ $4\frac{1}{4}$

2.
$$3\frac{4}{5}$$
 _____ $3\frac{9}{10}$

3.
$$2\frac{1}{3}$$
 _____ $2\frac{2}{5}$

4.
$$10\frac{2}{5}$$
 _____ $10\frac{3}{4}$



Name	Date	

Mr. O'Neil asked his students to record the length of time they read over the weekend. The times are listed in the table.

1. At the bottom of the page, make a line plot of the data.

2. One of the students read $\frac{3}{4}$ hour on Friday, $\frac{3}{4}$ hour on Saturday, and $\frac{3}{4}$ hour on Sunday. How many hours did that student read over the weekend? Name that student.

Student	Length of time (in hours)
Robin	$\frac{1}{2}$
Bill	1
Katrina	$\frac{3}{4}$
Kelly	$1\frac{3}{4}$
Mary	$1\frac{1}{2}$
Gail	$2\frac{1}{4}$
Scott	$1\frac{3}{4}$
Ben	$2\frac{2}{4}$



vanic Datc

Estimate each sum or difference to the nearest half or whole number by rounding. Explain your estimate using words or a number line.

1.
$$2\frac{9}{10} + 2\frac{1}{4} \approx$$

2.
$$11\frac{8}{9} - 3\frac{3}{8} \approx$$



1.
$$3\frac{2}{5} + \underline{\hspace{1cm}} = 4$$

2.
$$2\frac{3}{8} + \frac{7}{8}$$



1.
$$2\frac{3}{8} + 1\frac{5}{8}$$

2.
$$3\frac{4}{5} + 2\frac{3}{5}$$



1.
$$10\frac{5}{6} - \frac{4}{6}$$

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



Solve using any strategy.

1.
$$4\frac{2}{3} - 2\frac{1}{3}$$

2.
$$12\frac{5}{8} - 8\frac{7}{8}$$



1.
$$7\frac{1}{6} - 2\frac{4}{6}$$

2.
$$12\frac{5}{8} - 3\frac{7}{8}$$



Name	Date

1. Solve using unit form.

$$5 \times \frac{2}{3}$$

2. Solve.

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



Solve using any method.

1.
$$7 \times \frac{3}{4}$$

2.
$$9 \times \frac{2}{5}$$

3.
$$60 \times \frac{5}{8}$$



Name	Data	
Ivallie	Date	

Multiply. Write each product as a mixed number.

1.
$$4 \times 5\frac{3}{8}$$

2.
$$4\frac{3}{10} \times 3$$



1. Fill in the unknown factors.

$$8 \times 5\frac{2}{3} = (\underline{} \times 5) + (\underline{} \times \frac{2}{3})$$

2. Multiply. Use the distributive property.

$$6\frac{5}{8} \times 7$$



Name	Date	

Use the RDW process to solve.

Jeff has ten packages that he wants to mail. Nine identical packages weigh $2\frac{7}{8}$ pounds each. A tenth package weighs two times as much as one of the other packages. How many pounds do all ten packages weigh?



Name	Date	

Coach Taylor asked his team to record the distance they ran during practice.

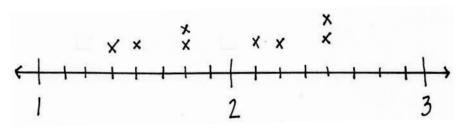
The distances are listed in the table.

1. Use the table to locate the incorrect data on the line plot.

Circle any incorrect points.

Mark any missing points.

Distance Ran During Practice



Distance (in miles)

x=1 team member

2. Of the team members who ran $1\frac{6}{8}$ miles, how many miles did those team members run combined?

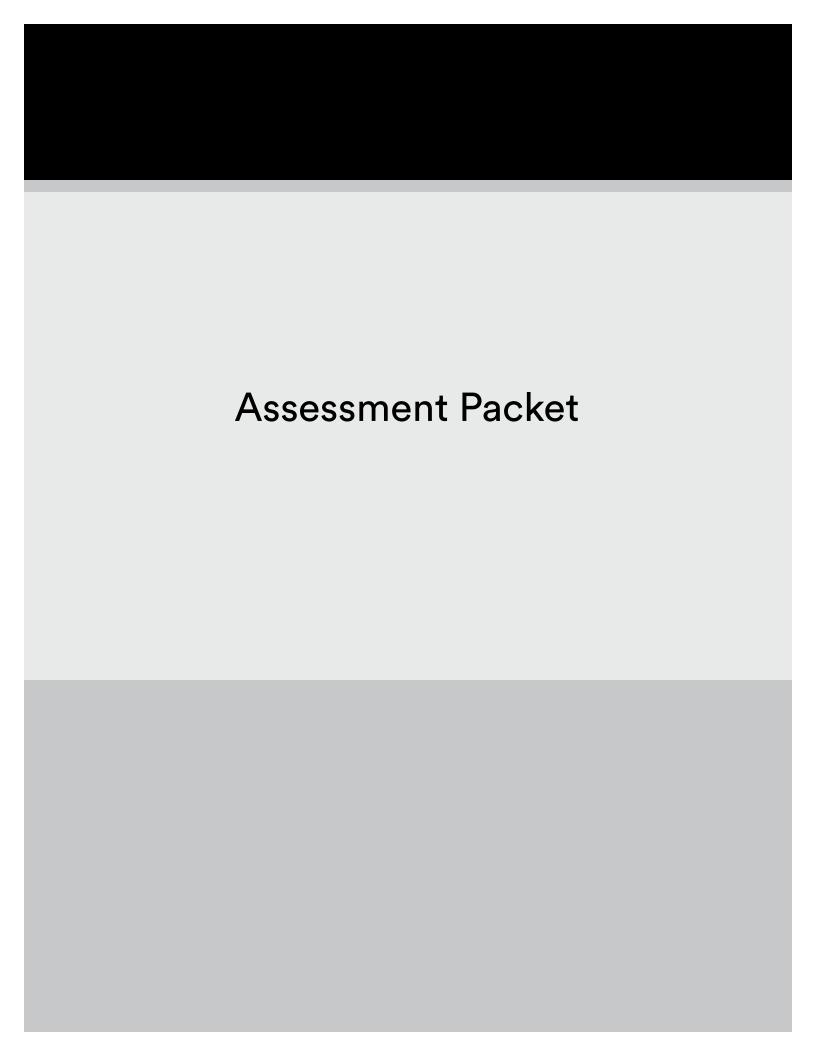
Team Members	Distance (in miles)
Alec	$1\frac{3}{4}$
Henry	$1\frac{1}{2}$
Charles	2 1 8
Steve	$1\frac{3}{4}$
Pitch	$2\frac{2}{4}$
Raj	1 6 8
Pam	$2\frac{1}{2}$
Tony	1 ³ / ₈

Find the sums.

1.
$$\frac{0}{20} + \frac{1}{20} + \frac{2}{20} + \cdots + \frac{20}{20}$$

2.
$$\frac{0}{200} + \frac{1}{200} + \frac{2}{200} + \dots + \frac{200}{200}$$





- 1. Let each small square represent $\frac{1}{4}$.
 - a. Using the same unit, draw and shade the following fractions. Represent each as a sum of unit fractions.

Example: $\frac{3}{4}$	
$\frac{3}{4} = \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$	

iii. $\frac{5}{4}$

b. Record the decompositions of Parts (i) and (iii) using only 2 addends.

i.

iii.

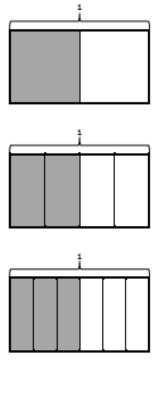
Rewrite the equations from Part (a) as the multiplication of a whole number by a unit fraction.

i.

ii.

iii.

2. a. Using the fractional units shown, identify the fraction of the rectangle that is shaded. Continue this pattern by drawing the next area model in the sequence and identifying the fraction shaded.



Use multiplication to explain why the first b. two fractions are equivalent.

- 3. Cross out the fraction that is not equivalent to the other three. Show how you know.
 - a. $\frac{3}{5}$ $\frac{60}{100}$ $\frac{6}{10}$ $\frac{6}{5}$

b. $\frac{6}{4}$ $\frac{3}{2}$ $\frac{12}{8}$ $\frac{8}{4}$

4. Fill in the circle with <, =, or > to make a true number sentence. Justify each response by drawing a model (such as an area model or a number line), creating common denominators or numerators, or explaining a comparison to a benchmark fraction.



5. Fill in the blanks to make each number sentence true. Draw a number line, a tape diagram, or an area model to represent each problem.

a.
$$=\frac{5}{12}+\frac{6}{12}$$

b.
$$\frac{53}{100} - \frac{27}{100} =$$

c.
$$\frac{8}{12}$$
 + ____ = 1

d.
$$\frac{3}{10} + \frac{6}{10} + \frac{2}{10} =$$

e.
$$1 - \frac{5}{8} =$$

f.
$$\frac{7}{8} - \frac{3}{8} =$$

- 6. Ray, Robin, and Freddy went fishing.
 - a. They spent $\frac{1}{6}$ of their money on water, $\frac{4}{6}$ of their money on lunch, and the rest on worms. What fraction of their money was spent on worms? Draw a model, and write an equation to solve.

b. Robin noticed her water bottle was $\frac{1}{2}$ full and Freddy's was $\frac{3}{4}$ full. Robin said, "My $\frac{1}{2}$ full bottle has more water than your $\frac{3}{4}$ full bottle." Explain how $\frac{1}{2}$ bottle could be more than $\frac{3}{4}$ bottle.

- c. Ray, Robin, and Freddy each had identical containers of worms. Ray used $\frac{3}{8}$ container. Robin used $\frac{6}{8}$ container, and Freddy used $\frac{7}{8}$ container. How many total containers of worms did they use?
- d. Express the number of remaining containers as a product of a whole number and a unit fraction.

e. Six out of the eight fish they caught were trout. What is another fraction equal to 6 eighths? Write a number sentence, and draw a model to show the two fractions are equal.

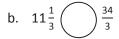


1. a. Partition the tape diagram to show $5 \times \frac{2}{3}$. Partition the number line to show $10 \times \frac{1}{3}$.



b. Use the models above to explain why $5 \times \frac{2}{3} = 10 \times \frac{1}{3}$.

2. Fill in the circles below with <, =, or > to make true number sentences. Use decomposition or multiplication to justify your answer.



3. Generate a pattern of at least 13 fractions by adding $\frac{4}{3}$ to $\frac{1}{3}$ and then continuing to add $\frac{4}{3}$ to each fraction. Circle each fraction equal to a whole number. Write what you notice about the pattern of whole numbers. The first two fractions are written for you.

$$\frac{1}{3}$$
, $\frac{5}{3}$,

4. Find each sum or difference.

a.
$$6\frac{4}{10} + 7\frac{7}{10}$$

b.
$$3\frac{3}{8} + 6\frac{5}{8} + 1\frac{7}{8}$$

c.
$$1\frac{9}{12} - 1\frac{4}{12}$$

d.
$$5\frac{2}{5} - 1\frac{3}{5}$$

5. a. Rewrite $3 \times \frac{6}{8}$ as the product of a unit fraction and a whole number. Solve.

b. Rewrite $4 \times 6\frac{2}{3}$ as the product of a unit fraction and a whole number. Solve.

6. Determine if the following are true or false. Explain how you know using models or words. Make false problems true by rewriting the right side of the number sentence.

a.
$$7\frac{1}{3} = 7 + \frac{1}{3}$$

b.
$$\frac{5}{3} = \frac{3}{3} + \frac{2}{3}$$

c.
$$\frac{13}{6} - \frac{5}{6} = \frac{13-5}{6}$$

d.
$$\frac{11}{3} = 11 + \frac{1}{3}$$

e.
$$\frac{7}{8} + \frac{7}{8} + \frac{7}{8} + \frac{7}{8} = 4 \times \frac{7}{8}$$

f.
$$5 \times 3\frac{3}{4} = 15 + \frac{3}{4}$$

- 7. The chart to the right shows data Amashi collected about butterfly wingspans.
 - a. At the bottom of this page, create a line plot to display the data in the table.
 - b. What is the difference in wingspan between the widest and narrowest butterflies on the chart?

c. Three butterflies have the same wingspan. Explain how you know the measurements are equal.

Butterfly	Wingspan (inches)
Monarch	$3\frac{7}{8}$
Milbert's Tortoiseshell	$2\frac{5}{8}$
Zebra Swallowtail	$2\frac{1}{2}$
Viceroy	$2\frac{6}{8}$
Postman	3 - 3 - 8
Purple Spotted Swallowtail	$2\frac{2}{8}$
Julia	$3\frac{2}{4}$
Southern Dogface	$2\frac{3}{8}$
Tiger Swallowtail	$3\frac{1}{2}$
Regal Fritillary	$3\frac{4}{8}$



Solve each problem. Draw a model, write an equation, and write a statement for each.

d. Amashi wants to display a Postman and Viceroy side by side in a photo box with a width of 6 inches. Will these two butterflies fit? Explain how you know.

e. Compare the wingspan of the Milbert's Tortoiseshell and the Zebra Swallowtail using >, <, or =.

f. The Queen Alexandra Birdwing can have a wingspan that is 5 times as wide as the Southern Dogface's. How many inches can the Birdwing's wingspan be?

g. Amashi discovered a pattern. She started with $2\frac{2}{8}$ inches and added $\frac{1}{8}$ inch to each measurement. List the next four measurements in her pattern. Name the five butterflies whose wingspans match the measurements in her pattern.

