A Story of Units®

Eureka Math[™]

Grade 5, Module 3

Student File_B

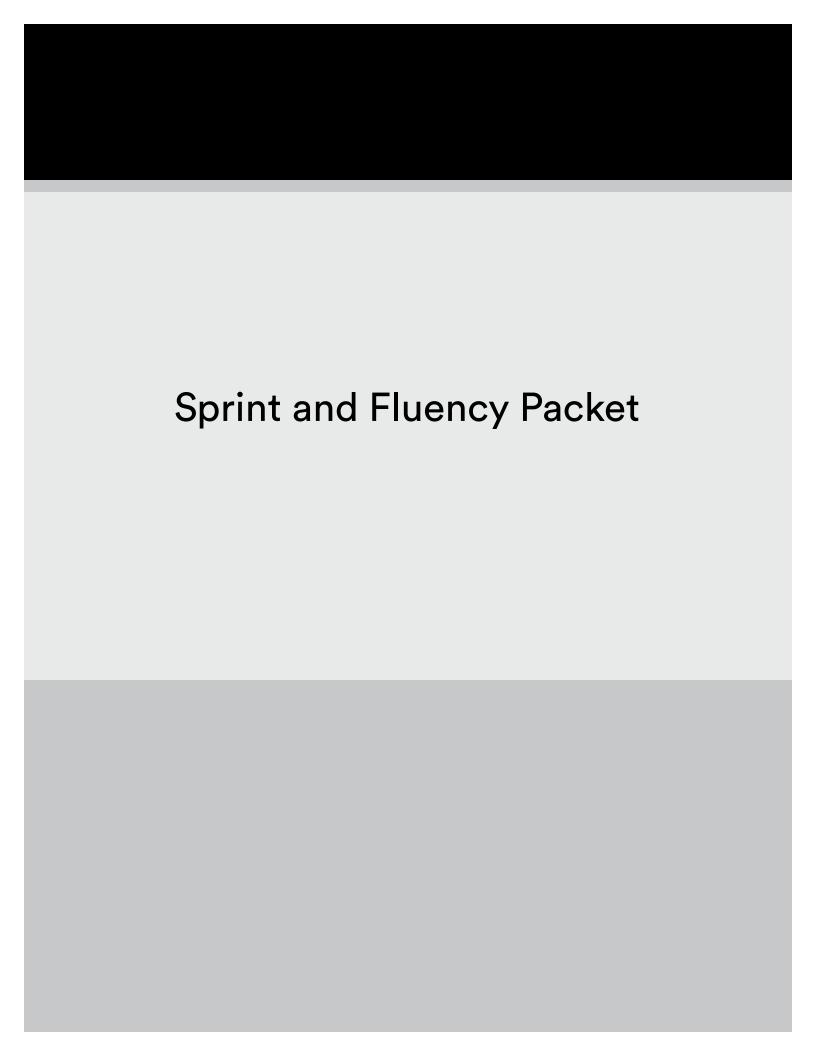
Contains Sprint and Fluency, Exit Ticket, and Assessment Materials

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10 9 8 7 6 5 4 3 2 1



A

Write the Missing Factor

1.	10 = 5 ×
1.	
2.	10 = 2 ×
3.	8 = 4 ×
4.	9 = 3 ×
5.	6 = 2 ×
6.	6 = 3 ×
7.	12 = 6 ×
8.	12 = 3 ×
9.	12 = 4 ×
10.	12 = 2 × 2 ×
11.	12 = 3 × 2 ×
12.	20 = 5 × 2 ×
13.	20 = 5 × 2 ×
14.	16 = 8 ×
15.	16 = 4 × 2 ×
16.	24 = 8 ×
17.	24 = 4 × 2 ×
18.	24 = 4 × × 2
19.	24 = 3 × 2 ×
20.	24 = 3 × × 2
21.	6 × 4 = 8 ×
22.	6 × 4 = 4 × 2 ×

23.	28 = 7 ×	
24.	28 = 2 × 2 ×	
25.	28 = 2 × × 2	
26.	28 =×2×2	
27.	36 = 3 × 3 ×	
28.	9 × 4 = 3 × 3 ×	
29.	9 × 4 = 6 ×	
30.	9 × 4 = 3 × 2 ×	
31.	8 × 6 = 4 × × 2	
32.	9 × 9 = 3 × × 3	
33.	8 × 8 = × 8	
34.	7 × 7 = × 7	
35.	8 × 3 = × 6	
36.	16 × 2 = × 4	
37.	2 × 18 = × 9	
38.	28 × 2 = × 8	
39.	24 × 3 = × 9	
40.	6 × 8 = × 12	
41.	27 × 3 = × 9	
42.	12 × 6 = × 8	
43.	54 × 2 = × 12	
44.	9 × 13 = × 39	

B

Write the Missing Factor

Number Correct:	
Improvement:	

1.	6 = 2 ×
2.	6 = 3 ×
3.	9 = 3 ×
4.	8 = 4 ×
5.	10 = 5 ×
6.	10 = 2 ×
7.	20 = 10 ×
8.	20 = 5 × 2 ×
9.	12 = 6 ×
10.	12 = 3 ×
11.	12 = 4 ×
12.	12 = 2 × 2 ×
13.	12 = 3 × 2 ×
14.	24 = 8 ×
15.	24 = 4 × 2 ×
16.	24 = 4 × × 2
17.	24 = 3 × 2 ×
18.	24 = 3 × × 2
19.	16 = 8 ×
20.	16 = 4 × 2 ×
21.	8 × 2 = 4 ×
22.	8 × 2 = 2 × 2 ×
	-

23.	28 = 4 ×	
24.	28 = 2 × 2 ×	
25.	28 = 2 × × 2	
26.	28 =× 2 × 2	
27.	36 = 2 × 2 ×	
28.	9 × 4 = 2 × 2 ×	
29.	9 × 4 = 6 ×	
30.	9 × 4 = 2 × 3 ×	
31.	8 × 6 = 4 × × 2	
32.	8 × 8 = 4 × × 2	
33.	9 × 9 = × 9	
34.	6 × 6 = × 6	
35.	6 × 4 = × 8	
36.	16 × 2 = × 8	
37.	2 × 18 = × 4	
38.	28 × 2 = × 7	
39.	24 × 3 = × 8	
40.	8 × 6 = × 4	
41.	12 × 6 = × 9	
42.	27 × 3 = × 9	
43.	54 × 2 = × 9	
44.	8 × 13 = × 26	

Find the Missing Numerator or Denominator

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

23.	$\frac{1}{3} = \frac{1}{12}$
24.	$\frac{2}{3} = \frac{1}{12}$
25.	$\frac{8}{12} = {3}$
26.	$\frac{12}{16} = \frac{3}{}$
27.	$\frac{3}{5} = {25}$
28.	$\frac{4}{5} = \frac{28}{}$
29.	$\frac{18}{24} = \frac{3}{}$
30.	$\frac{24}{30} = {5}$
31.	$\frac{5}{6} = \frac{35}{}$
32.	$\frac{56}{63} = {9}$
33.	$\frac{64}{72} = \frac{8}{}$
34.	$\frac{5}{8} = \frac{5}{64}$
35.	$\frac{5}{8} = \frac{5}{64}$ $\frac{5}{6} = \frac{45}{6}$
36.	$\frac{45}{81} = {9}$
37.	$\frac{6}{7} = \frac{48}{}$
38.	$\frac{36}{81} = {9}$
39.	$\frac{8}{56} = \frac{1}{}$
40.	$\frac{35}{63} = \frac{5}{}$
41.	$\frac{1}{6} = \frac{12}{}$
42.	$\frac{3}{7} = \frac{36}{}$
43.	$\frac{48}{60} = \frac{4}{}$
44.	72 =

Improvement: _____

Find the Missing Numerator or Denominator

1.	$\frac{1}{5} = \frac{2}{}$
1.	3
2.	$\frac{2}{5} = \frac{2}{10}$ $\frac{3}{5} = \frac{10}{10}$
3.	$\frac{3}{5} = \frac{10}{10}$
	4
4.	$\frac{4}{5} = \frac{10}{10}$
5.	$\frac{1}{3} = \frac{2}{3}$
6.	$\frac{1}{3} = \frac{1}{6}$
7.	$\frac{1}{3} = \frac{1}{6}$ $\frac{2}{3} = \frac{4}{3}$
8.	$\frac{1}{2} = \frac{1}{0}$
9.	$\frac{2}{3} = \frac{6}{3}$
10.	$\frac{1}{3} = \frac{1}{9}$ $\frac{2}{3} = \frac{6}{1}$ $\frac{1}{4} = \frac{2}{1}$
11.	$\frac{3}{4} = \frac{6}{}$
12.	$\frac{1}{4} = \frac{1}{12}$
13.	3 -=-
14.	$\frac{3}{4} = \frac{3}{12}$ $\frac{2}{4} = \frac{1}{4}$
15.	2 =
	2
16.	_
17.	$\frac{10}{4} = \frac{2}{10}$
18.	$\frac{8}{10} = \frac{4}{}$
19.	$\frac{3}{9} = \frac{1}{}$
20.	$\frac{6}{9} = \frac{2}{9}$
21.	$\frac{1}{4} = \frac{1}{12}$ 9 3
22.	$\frac{9}{12} = \frac{3}{}$

23.	$\frac{1}{3} = \frac{4}{}$	
24.	$\frac{2}{3} = \frac{8}{}$	
25.	$\frac{8}{12} = \frac{2}{1}$	
26.	$\frac{12}{16} = \frac{1}{4}$	
27.	$\frac{3}{5} = \frac{15}{-}$	
28.	$\frac{4}{5} = \frac{3}{35}$	
29.	$\frac{18}{24} = \frac{1}{4}$	
30.	$\frac{24}{30} = \frac{4}{}$	
31.	$\frac{5}{6} = {42}$	
32.	$\frac{56}{63} = \frac{8}{}$	
33.	$\frac{64}{72} = {9}$	
34.	$\frac{5}{8} = \frac{40}{}$	
35.	$\frac{5}{6} = \frac{5}{54}$	
36.	$\frac{45}{81} = \frac{5}{}$	
37.	$\frac{6}{7} = {56}$	
38.	$\frac{36}{81} = \frac{4}{}$	
39.	$\frac{8}{56} = {7}$	
40.	$\frac{35}{63} = {9}$	
41.	$\frac{1}{6} = \frac{1}{72}$	
42.	$\frac{3}{7} = \frac{3}{84}$	
43.	$\frac{48}{60} = \frac{1}{5}$	
44.	$\frac{72}{34} = \frac{6}{}$	

Find the Missing Numerator or Denominator

	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1.	$\frac{1}{2} = \frac{1}{4}$
2.	$\frac{1}{5} = \frac{2}{-}$
3.	$\frac{2}{5} = \frac{10}{10}$
4.	$\frac{3}{5} = \frac{3}{10}$
5.	$\frac{4}{5} = \frac{10}{10}$
6.	$\frac{4}{5} = \frac{1}{10}$ $\frac{1}{3} = \frac{2}{3}$
7.	$\frac{2}{3} = \frac{2}{6}$ $\frac{1}{3} = \frac{3}{2}$
8.	$\frac{1}{3} = \frac{3}{}$
9.	$\frac{2}{3} = {9}$
10.	$\frac{1}{4} = \frac{1}{8}$
11.	$\frac{3}{4} = {8}$
12.	$\frac{1}{4} = \frac{3}{}$
13.	$\frac{3}{4} = \frac{9}{}$
14.	$\frac{2}{4} = \frac{2}{2}$
15.	$\frac{2}{-} = \frac{1}{-}$
16.	$\frac{2}{10} = \frac{1}{}$
17.	$\frac{4}{10} = {5}$
18.	$\frac{8}{10} = {5}$
19.	$\frac{3}{9} = {3}$
20.	$\frac{6}{9} = {3}$
21.	$\frac{3}{12} = \frac{1}{}$
22.	$\frac{9}{12} = {4}$
	·

23.	$\frac{1}{3} = \frac{1}{12}$
24.	$\frac{2}{3} = \frac{2}{12}$
25.	$\frac{8}{12} = {3}$
26.	$\frac{12}{16} = \frac{3}{}$
27.	$\frac{3}{5} = {25}$
28.	$\frac{4}{5} = \frac{28}{}$
29.	$\frac{18}{24} = \frac{3}{}$
30.	$\frac{24}{30} = {5}$
31.	$\frac{5}{6} = \frac{35}{}$
32.	$\frac{56}{63} = {9}$
33.	$\frac{64}{72} = \frac{8}{}$
34.	$\frac{5}{8} = \frac{1}{64}$
35.	$\frac{5}{6} = \frac{45}{}$
36.	$\frac{45}{81} = {9}$
37.	$\frac{6}{7} = \frac{48}{}$
38.	$\frac{36}{81} = {9}$
39.	$\frac{8}{56} = \frac{1}{}$
40.	$\frac{35}{63} = \frac{5}{}$
41.	$\frac{1}{6} = \frac{12}{}$
42.	$\frac{3}{7} = \frac{36}{}$
43.	$\frac{48}{60} = \frac{4}{}$
44.	$\frac{72}{84} = {7}$



Find the Missing Numerator or Denominator

Number Correct: _____ Improvement: _____

1.	$\frac{1}{5} = \frac{2}{}$
2.	$\frac{1}{5} = \frac{2}{5}$ $\frac{2}{5} = \frac{10}{10}$
3.	$\frac{3}{5} = \frac{3}{10}$
4.	$\frac{4}{5} = \frac{10}{10}$
5.	$\frac{4}{5} = \frac{1}{10}$ $\frac{1}{3} = \frac{2}{3}$
6.	$\frac{1}{3} = \frac{1}{6}$
7.	$\frac{1}{3} = \frac{1}{6}$ $\frac{2}{3} = \frac{4}{3}$ $\frac{1}{3} = \frac{9}{9}$ $\frac{2}{3} = \frac{6}{3}$ $\frac{1}{4} = \frac{2}{3}$
8.	$\frac{1}{2} = \frac{1}{0}$
9.	$\frac{2}{3} = \frac{6}{}$
10.	$\frac{1}{4} = \frac{2}{4}$
11.	$\frac{3}{4} = \frac{6}{}$
12.	$\frac{1}{4} = \frac{1}{12}$
13.	$\frac{3}{4} = \frac{12}{12}$
14.	$\frac{\frac{3}{4}}{\frac{2}{4}} = \frac{1}{\frac{1}{2}}$
15.	$\frac{2}{6} = \frac{2}{3}$
16.	$\frac{2}{10} = \frac{1}{5}$
17.	$\frac{4}{10} = \frac{2}{10}$
18.	$\frac{8}{10} = \frac{4}{}$
19.	$\frac{3}{9} = \frac{1}{}$
20.	$\frac{6}{9} = \frac{2}{}$
21.	$\frac{1}{4} = \frac{1}{12}$
22.	9 _ 3
22.	12

	improvement.
	1 4
23.	$\frac{1}{3} = \frac{4}{}$
	3
24.	$\frac{2}{3} = \frac{8}{3}$ $\frac{8}{3} = \frac{2}{3}$
2-7.	3
25	$\frac{8}{12} = \frac{2}{}$
25.	12 = —
	12
26.	$\frac{12}{16} = \frac{1}{4}$
	3 15
27.	$\frac{3}{5} = \frac{15}{}$
	4
28.	$\frac{4}{5} = {35}$
29.	$\frac{18}{24} = \frac{1}{4}$
	24 4
30.	$\frac{24}{30} = \frac{4}{}$
	30
31.	$\frac{5}{6} = \frac{1}{42}$
31.	$\frac{1}{6} = \frac{1}{42}$
22	$\frac{56}{63} = \frac{8}{}$
32.	
	64
33.	$\frac{31}{72} = \frac{1}{9}$
	5 40
34.	$\frac{5}{8} = \frac{40}{}$
	0
35.	$\frac{5}{6} = \frac{5}{54}$
	6 54
36.	45 = 5 = -
	81
37.	6
	7 = 56
38.	$\frac{36}{24} = \frac{4}{1}$
50.	81
39.	8
59.	5 6 = 7
40	35
40.	63 = 9
	1
41.	$\frac{1}{6} = \frac{1}{72}$
42.	$\frac{3}{7} = \frac{3}{84}$
43.	48 =
	60 5
44.	$\frac{72}{2} = \frac{6}{2}$
	84

A

Subtracting Fractions from a Whole Number

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

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



Subtracting Fractions from a Whole Number

Number Correct: _____ Improvement: _____

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

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

Circle the Equivalent Fraction

1.	² / ₄ =	1/2	1/3
2.	² / ₆ =	1/2	1/3
3.	² / ₈ =	1/2	1/4
4.	⁵ / ₁₀ =	1/2	1/4
5.	⁵ / ₁₅ =	1/2	1/3
6.	⁵ / ₂₀ =	1/2	1/4
7.	4/8 =	1/2	1/4
8.	4/ ₁₂ =	1/2	1/3
9.	4/ ₁₆ =	1/2	1/4
10.	³ / ₆ =	1/2	1/3
11.	³ / ₉ =	1/2	1/3
12.	³ / ₁₂ =	1/2	1/4
13.	⁴ / ₆ =	2/3	1/3
14.	⁶ / ₁₂ =	2/3	1/2
15.	⁶ / ₁₈ =	2/3	1/3
16.	⁶ / ₃₀ =	1/5	1/3
17.	⁶ / ₉ =	2/3	1/3
18.	7/ ₁₄ =	1/2	1/3
19.	⁷ / ₂₁ =	1/2	1/3
20.	⁷ / ₄₂ =	1/6	1/7
21.	8/ ₁₂ =	2/3	3/4
22.	9/ ₁₈ =	1/2	1/3

23.	⁹ / ₂₇ =	2/3	1/3	1/4
24.	⁹ / ₆₃ =	1/6	1/7	1/8
25.	8/ ₁₂ =	2/3	3/4	⁴ / ₅
26.	⁸ / ₁₆ =	1/2	1/3	1/4
27.	⁸ / ₂₄ =	1/2	1/3	1/4
28.	⁸ / ₆₄ =	1/7	1/8	1/9
29.	¹² / ₁₈ =	3/4	⁵ / ₆	$^{2}/_{3}$
30.	¹² / ₁₆ =	3/4	$\frac{5}{6}$	$^{2}/_{3}$
31.	9/ ₁₂ =	3/4	$\frac{5}{6}$	$^{2}/_{3}$
32.	6/8 =	3/4	$\frac{5}{6}$	$^{2}/_{3}$
33.	¹⁰ / ₁₂ =	3/4	$\frac{5}{6}$	$^{2}/_{3}$
34.	¹⁵ / ₁₈ =	3/4	$\frac{5}{6}$	$^{2}/_{3}$
35.	8/ ₁₀ =	3/4	⁴ / ₅	$^{2}/_{3}$
36.	¹⁶ / ₂₀ =	3/4	$^{4}/_{5}$	$^{2}/_{3}$
37.	¹² / ₁₅ =	3/4	⁴ / ₅	$^{2}/_{3}$
38.	¹⁸ / ₂₇ =	3/4	⁴ / ₅	$^{2}/_{3}$
39.	²⁷ / ₃₆ =	3/4	⁴ / ₅	$^{2}/_{3}$
40.	³² / ₄₀ =	3/4	⁴ / ₅	$^{2}/_{3}$
41.	⁴⁵ / ₅₄ =	3/4	4/5	⁵ / ₆
42.	²⁴ / ₃₆ =	3/4	⁴ / ₅	$^{2}/_{3}$
43.	⁶⁰ / ₇₂ =	3/4	5/6	2/3
44.	⁴⁸ / ₆₀ =	3/4	4/5	⁵ / ₆

B

Circle the Equivalent Fraction

Number Correct: _____

1.	⁵ / ₁₀ =	1/2	1/3
2.	⁵ / ₁₅ =	1/2	1/3
3.	⁵ / ₂₀ =	1/2	1/4
4.	² / ₄ =	1/2	1/3
5.	² / ₆ =	1/2	1/3
6.	² / ₈ =	1/2	1/4
7.	³ / ₆ =	1/2	1/3
8.	³ / ₉ =	1/2	1/3
9.	³ / ₁₂ =	1/4	1/3
10.	4/8 =	1/2	1/3
11.	4/ ₁₂ =	1/2	1/3
12.	4/ ₁₆ =	1/4	1/3
13.	⁴ / ₆ =	2/3	1/2
14.	⁷ / ₁₄ =	$^{2}/_{3}$	1/2
15.	⁷ / ₂₁ =	¹ / ₅	1/3
16.	⁷ / ₃₅ =	¹ / ₅	1/3
17.	⁶ / ₉ =	$^{2}/_{3}$	1/3
18.	⁶ / ₁₂ =	1/2	1/3
19.	⁶ / ₁₈ =	¹ / ₆	1/3
20.	⁶ / ₃₆ =	¹ / ₆	1/3
21.	8/ ₁₂ =	2/3	3/4
22.	8/ ₁₆ =	1/2	1/3

23.	8/ ₂₄ =	2/3	1/3	1/4
24.	⁸ / ₅₆ =	1/6	1/7	1/8
25.	8/ ₁₂ =	2/3	$^{3}/_{4}$	$^{4}/_{5}$
26.	9/ ₁₈ =	1/2	1/3	1/4
27.	⁹ / ₂₇ =	1/2	1/3	1/4
28.	⁹ / ₇₂ =	1/7	1/8	1/9
29.	¹² / ₁₈ =	3/4	⁵ / ₆	$^{2}/_{3}$
30.	⁶ / ₈ =	3/4	⁵ / ₆	$^{2}/_{3}$
31.	⁹ / ₁₂ =	3/4	⁵ / ₆	$^{2}/_{3}$
32.	¹² / ₁₆ =	3/4	⁵ / ₆	$^{2}/_{3}$
33.	⁸ / ₁₀ =	3/4	⁴ / ₅	$^{2}/_{3}$
34.	¹⁶ / ₂₀ =	3/4	⁴ / ₅	$^{2}/_{3}$
35.	¹² / ₁₅ =	3/4	4/5	2/3
36.	¹⁰ / ₁₂ =	3/4	$^{4}/_{5}$	$\frac{5}{6}$
37.	¹⁵ / ₁₈ =	3/4	$\frac{5}{6}$	$^{2}/_{3}$
38.	¹⁶ / ₂₄ =	3/4	⁴ / ₅	$^{2}/_{3}$
39.	²⁴ / ₃₂ =	3/4	⁴ / ₅	$^{2}/_{3}$
40.	³⁶ / ₄₅ =	3/4	⁴ / ₅	$^{2}/_{3}$
41.	⁴⁰ / ₄₈ =	3/4	4/5	⁵ / ₆
42.	²⁴ / ₃₆ =	3/4	⁴ / ₅	$^{2}/_{3}$
43.	⁴⁸ / ₆₀ =	3/4	⁵ / ₆	⁴ / ₅
44.	⁶⁰ / ₇₂ =	3/4	⁵ / ₆	2/3

Add and Subtract Fractions with Like Units

1. $\frac{1}{5} + \frac{1}{5} =$ 2. $\frac{1}{10} + \frac{5}{10} =$ 3. $\frac{1}{10} + \frac{7}{10} =$	
$\frac{1}{10} + \frac{1}{10} =$	
3. $\frac{1}{10} + \frac{7}{10} =$	
4. $\frac{2}{5} + \frac{2}{5} =$	
$\frac{5}{10} - \frac{4}{10} =$	
$6. \qquad \frac{3}{5} - \frac{1}{5} =$	
7. $\frac{3}{10} + \frac{3}{10} =$	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	
9. $\frac{1}{4} + \frac{1}{4} =$	
1 2	
10. $\frac{-}{4} + \frac{-}{4} =$	
<u> </u>	
12 12 12 12 12 12 1 1 1 1 1 1	
12	
14. $\frac{1}{3} + \frac{1}{3} =$	
15. $\frac{1}{12} - \frac{1}{12} =$	
16. $\frac{5}{12} + \frac{6}{12} =$	
$\frac{7}{12} + \frac{4}{12} =$	
18. $\frac{4}{6} - \frac{1}{6} =$	
19. $\frac{1}{6} + \frac{2}{6} =$	
$\frac{1}{6} + \frac{1}{6} + \frac{1}{6} =$	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	
$\frac{1}{12} + \frac{1}{12} + \frac{1}{12} =$	

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

Improvement: _____

Add and Subtract Fractions with Like Units

	1 1
1.	$\frac{1}{2} + \frac{1}{2} =$
2.	$\frac{1}{2} + \frac{1}{2} = \frac{2}{8} + \frac{1}{8} + \frac{1}$
	2 3
3.	$\frac{2}{8} + \frac{3}{8} =$
4.	$\frac{\frac{2}{8} + \frac{3}{8}}{\frac{2}{12} - \frac{1}{12}} =$
5.	5 2
6.	$\frac{1}{12} + \frac{1}{12} = \frac{4}{8} + \frac{3}{8} = \frac{4}{8} - \frac{3}{8} = \frac{1}{8} = $
7.	$\frac{4}{8} - \frac{3}{8} = \frac{1}{8} + \frac{5}{8} = \frac{1}{8}$
	8 8
8.	$\frac{1}{8} + \frac{3}{8} =$
9.	$ \frac{1}{8} + \frac{5}{8} = \frac{3}{4} - \frac{1}{4} = \frac{3}{6} - \frac{3}{6} = \frac{3}{6} =$
	3 3
10.	 = = 6 6 = 6
11.	3 3
12.	$\frac{2}{3} + \frac{1}{3} =$
13.	$\frac{6}{9} - \frac{4}{9} =$
14.	$\frac{3}{9} - \frac{4}{9} = \frac{5}{9} - \frac{3}{9} = \frac{2}{9} + \frac{2}{9} = \frac{1}{12} + \frac{3}{12} = \frac{3}{12} = \frac{3}{12} + \frac{3}{12} = \frac{3}{12} + \frac{3}$
15.	2 2
15.	9 9
16.	12 12
17.	$\frac{1}{12} - \frac{1}{12} =$
18.	$\frac{9}{12} - \frac{6}{12} =$
19.	0 7 _
20.	$\frac{1}{10} - \frac{1}{10} - \frac{2}{10} - \frac{2}{10} + \frac{2}{10} $
20.	1 1 1
21.	$\frac{1}{10} + \frac{1}{10} + \frac{1}{10} =$
22.	$\frac{7}{10} - \frac{2}{10} - \frac{4}{10} =$

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

Add and Subtract Whole Numbers and Ones with Fraction Units

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

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

Improvement: _____

Add and Subtract Whole Numbers and Ones with Fraction

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

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

Subtract Fractions with Unlike Units

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

23.	$\frac{4}{5} - \frac{7}{10} =$	
24.	$^{2}/_{12} - ^{1}/_{12} =$	
25.	1/6 - 1/12 =	
26.	⁶ / ₁₂ - ¹ / ₁₂ =	
27.	1/2 - 1/12 =	
28.	¹ / ₂ - ⁵ / ₁₂ =	
29.	¹⁰ / ₁₂ - ⁵ / ₁₂ =	
30.	$\frac{5}{6} - \frac{5}{12} =$	
31.	¹ / ₃ - ³ / ₁₂ =	
32.	² / ₃ - ¹ / ₁₂ =	
33.	$^{2}/_{3} - ^{3}/_{12} =$	
34.	² / ₃ - ⁷ / ₁₂ =	
35.	1/4 - 2/12 =	
36.	¹ / ₅ - ¹ / ₁₅ =	
37.	¹ / ₃ - ¹ / ₁₅ =	
38.	$\frac{2}{3} - \frac{3}{15} =$	
39.	$\frac{2}{5} - \frac{4}{15} =$	
40.	$\frac{3}{4} - \frac{2}{12} =$	
41.	³ / ₄ - ⁵ / ₁₆ =	
42.	$\frac{4}{5} - \frac{5}{15} =$	
43.	³ / ₄ - ⁴ / ₁₂ =	
44.	³ / ₄ - ⁷ / ₁₆ =	

Subtract Fractions with Unlike Units

Number Correct: _____ Improvement: _____

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

23.	$3/_4 - 3/_8 =$	
24.	⁵ / ₁₅ - ¹ / ₁₅ =	
25.	$\frac{1}{3} - \frac{1}{15} =$	
26.	$\frac{3}{15} - \frac{1}{15} =$	
27.	$\frac{1}{5} - \frac{1}{15} =$	
28.	$\frac{1}{5} - \frac{2}{15} =$	
29.	¹² / ₁₅ - ⁴ / ₁₅ =	
30.	$4/_{5} - 4/_{15} =$	
31.	$\frac{1}{4} - \frac{2}{12} =$	
32.	$\frac{3}{4} - \frac{2}{12} =$	
33.	$3/_4 - 4/_{12} =$	
34.	$\frac{3}{4} - \frac{8}{12} =$	
35.	$\frac{1}{3} - \frac{3}{12} =$	
36.	$\frac{1}{6} - \frac{1}{12} =$	
37.	$\frac{1}{3} - \frac{3}{15} =$	
38.	$\frac{2}{3} - \frac{2}{15} =$	
39.	$\frac{2}{5} - \frac{2}{15} =$	
40.	$\frac{3}{4} - \frac{4}{12} =$	
41.	$\frac{3}{4} - \frac{7}{16} =$	
42.	4/5 - 4/15 =	
43.	$\frac{3}{4} - \frac{2}{12} =$	
44.	$\frac{3}{4} - \frac{5}{16} =$	

Make Larger Units

1.	² / ₄ =	
2.	² / ₆ =	
3.	² / ₈ =	
4.	⁵ / ₁₀ =	
5.	⁵ / ₁₅ =	
6.	⁵ / ₂₀ =	
7.	4/8 =	
8.	4/ ₁₂ =	
9.	⁴ / ₁₆ =	
10.	³ / ₆ =	
11.	³ / ₉ =	
12.	3/ ₁₂ =	
13.	4/ ₆ =	
14.	⁶ / ₁₂ =	
15.	⁶ / ₁₈ =	
16.	$\frac{6}{30} =$	
17.	⁶ / ₉ =	
18.	⁷ / ₁₄ =	
19.	⁷ / ₂₁ =	
20.	⁷ / ₄₂ =	
21.	8/ ₁₂ =	
22.	9/ ₁₈ =	

23.	⁹ / ₂₇ =	
24.	⁹ / ₆₃ =	
25.	8/ ₁₂ =	
26.	8/ ₁₆ =	
27.	8/ ₂₄ =	
28.	8/ ₆₄ =	
29.	12/ ₁₈ =	
30.	¹² / ₁₆ =	
31.	9/ ₁₂ =	
32.	6/8 =	
33.	¹⁰ / ₁₂ =	
34.	¹⁵ / ₁₈ =	
35.	8/ ₁₀ =	
36.	¹⁶ / ₂₀ =	
37.	¹² / ₁₅ =	
38.	¹⁸ / ₂₇ =	
39.	²⁷ / ₃₆ =	
40.	³² / ₄₀ =	
41.	⁴⁵ / ₅₄ =	
42.	²⁴ / ₃₆ =	
43.	60/ ₇₂ = 48/ ₆₀ =	
44.	48/ ₆₀ =	

B

Make Larger Units

 $\frac{5}{10} =$ 1. ⁵/₁₅ = 2. $\frac{5}{20} =$ 3. 2/4 = 4. $^{2}/_{6} =$ 5. 2/8 = 6. $\frac{3}{6} =$ 7. 3/9 = 8. $^{3}/_{12} =$ 9. 4/8 = 10. 4/₁₂ = 11. 4/16 = 12. $\frac{4}{6} =$ 13. ⁷/₁₄ = 14. ⁷/₂₁ = 15. 7/₃₅ = 16. $\frac{6}{9} =$ 17. $^{6}/_{12} =$ 18. 6/18 = 19. $6/_{36} =$ 20. 8/12 = 21. $8/_{16} =$ 22.

Number Correct:	
Improvement:	

23.	8/ ₂₄ =	
24.	⁸ / ₅₆ =	
25.	8/ ₁₂ =	
26.	9/ ₁₈ =	
27.	9/ ₂₇ =	
28.	9/ ₇₂ =	
29.	¹² / ₁₈ =	
30.	6/8 =	
31.	9/ ₁₂ =	
32.	¹² / ₁₆ =	
33.	8/ ₁₀ =	
34.	¹⁶ / ₂₀ =	
35.	¹² / ₁₅ =	
36.	¹⁰ / ₁₂ =	
37.	¹⁵ / ₁₈ =	
38.	¹⁶ / ₂₄ =	
39.	²⁴ / ₃₂ =	
40.	³⁶ / ₄₅ =	
41.	40/ ₄₈ =	
42.	²⁴ / ₃₆ =	
43.	⁴⁸ / ₆₀ =	
44.	⁶⁰ / ₇₂ =	

Circle the Smaller Fraction

1	1/	1/
1.	1/2	1/4
2.	1/2	3/4
3.	1/2	⁵ / ₈
4.	1/2	7/8
5.	1/2	1/10
6.	1/2	3/10
7.	1/2	⁵ / ₁₂
8.	1/2	¹¹ / ₁₂
9.	1/2	⁷ / ₁₀
10.	¹ / ₅	9/10
11.	² / ₅	1/10
12.	² / ₅	3/10
13.	³ / ₅	3/10
14.	³ / ₅	7/10
15.	4/5	1/10
16.	⁴ / ₅	9/10
17.	1/3	1/9
18.	1/3	² / ₉
19.	1/3	4/9
20.	1/3	8/9
21.	1/3	1/12
22.	1/3	⁵ / ₁₂

23.	1/4	1/8
24.	1/4	3/8
25.	1/4	⁷ / ₁₂
26.	1/4	¹¹ / ₁₂
27.	¹ / ₆	⁷ / ₁₂
28.	¹ / ₆	¹¹ / ₁₂
29.	2/3	¹ / ₆
30.	2/3	⁵ / ₆
31.	2/3	² / ₉
32.	2/3	4/9
33.	2/3	1/12
34.	2/3	⁵ / ₁₂
35.	2/3	¹¹ / ₁₂
36.	2/3	⁷ / ₁₂
37.	3/4	1/8
38.	3/4	1/8
39.	⁵ / ₆	⁷ / ₁₂
40.	⁵ / ₆	⁵ / ₁₂
41.	⁶ / ₇	³⁸ / ₄₂
42.	7/8	⁶² / ₇₂
43.	⁴⁹ / ₅₄	8/9
44.	⁶⁷ / ₇₂	¹¹ / ₁₂

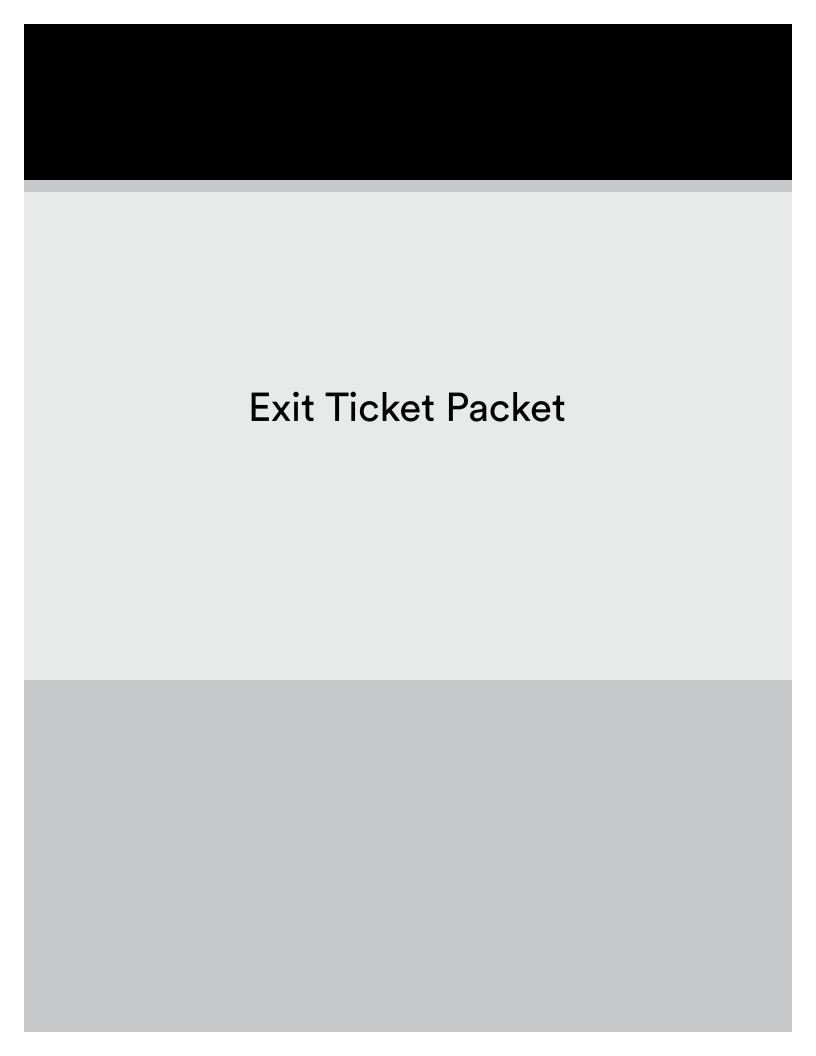


Circle the Smaller Fraction

Number Correct: _____ Improvement: _____

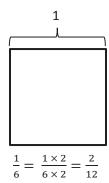
1.	1/2	1/6
2.	1/2	⁵ / ₆
3.	1/2	1/8
4.	1/2	3/8
5.	1/2	7/10
6.	1/2	9/10
7.	1/2	1/12
8.	1/2	⁷ / ₁₂
9.	1/5	1/10
10.	1/5	3/10
11.	² / ₅	7/10
12.	² / ₅	9/10
13.	3/5	1/10
14.	³ / ₅	9/10
15.	⁴ / ₅	³ / ₁₀
16.	⁴ / ₅	⁷ / ₁₀
17.	1/3	¹ / ₆
18.	1/3	⁵ / ₆
19.	1/3	⁵ / _a
20.	1/3	7/9
21.	1/3	⁷ / ₁₂
22.	1/3	¹¹ / ₁₂

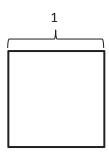
23.	1/4	⁵ / ₈
24.	1/4	7/8
25.	1/4	1/12
26.	1/4	⁵ / ₁₂
27.	1/6	1/12
28.	1/6	⁵ / ₁₂
29.	2/3	1/9
30.	2/3	⁷ / ₉
31.	2/3	⁵ / ₉
32.	2/3	8/9
33.	3/4	1/2
34.	3/4	⁵ / ₁₂
35.	3/4	11/12
36.	3/4	⁷ / ₁₂
37.	⁵ / ₆	¹ / ₁₂
38.	⁵ / ₆	¹¹ / ₁₂
39.	3/4	⁵ / ₈
40.	3/4	3/8
41.	⁶ / ₇	³⁴ / ₄₂
42.	7/8	⁶⁴ / ₇₂
43.	⁴⁷ / ₅₄	8/9
44.	65/72	¹¹ / ₁₂

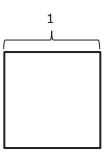


Name _____ Date ____

Estimate to mark points 0 and 1 above the number line, and $\frac{0}{6}$, $\frac{1}{6}$, $\frac{2}{6}$, $\frac{3}{6}$, $\frac{4}{6}$, $\frac{5}{6}$, and $\frac{6}{6}$ below it. Use the squares below to represent fractions equivalent to 1 sixth using both arrays and equations.







Name _____

Date _____

- 1. Show each expression on a number line. Solve.
 - a. $\frac{5}{5} + \frac{2}{5}$

b. $\frac{6}{3} + \frac{2}{3}$

- 2. Express each fraction as the sum of two or three equal fractional parts. Rewrite each as a multiplication equation. Show Part (b) on a number line.

Date ____

Solve by drawing the rectangular fraction model.

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

2. In one hour, Ed used $\frac{2}{5}$ of the time to complete his homework and $\frac{1}{4}$ of the time to check his email. How much time did he spend completing homework and checking email? Write your answer as a fraction. (Extension: Write the answer in minutes.)



Name	Data	
Maille _	Date	

1. Draw a model to help solve $\frac{5}{6} + \frac{1}{4}$. Write your answer as a mixed number.

2. Patrick drank $\frac{3}{4}$ liter of water Monday before jogging. He drank $\frac{4}{5}$ liter of water after his jog. How much water did Patrick drink altogether? Write your answer as a mixed number.



For the following problems, draw a picture using the rectangular fraction model and write the answer. Simplify your answer, if possible.

a.
$$\frac{1}{2} - \frac{1}{7} =$$

b.
$$\frac{3}{5} - \frac{1}{2} =$$



Lesson 5:

Subtract fractions with unlike units using the strategy of creating equivalent fractions.

Name	Date	

For the following problems, draw a picture using the rectangular fraction model and write the answer. Simplify your answer, if possible.

a.
$$1\frac{1}{5} - \frac{1}{2} =$$

b.
$$1\frac{1}{3} - \frac{5}{6} =$$



Name	Date	

Solve the word problem using the RDW strategy. Show all of your work.

Mr. Pham mowed $\frac{2}{7}$ of his lawn. His son mowed $\frac{1}{4}$ of it. Who mowed the most? How much of the lawn still needs to be mowed?



Name _____

Date _____

Add or subtract.

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

b.
$$3 - 1\frac{3}{4} =$$

c.
$$7\frac{3}{8} + 4 =$$

d.
$$4-2\frac{3}{7}=$$



Name _____ Date _____

Make like units, and then add.

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

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



Name _____ Date _____

Add.

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

2.
$$4\frac{5}{7} + 3\frac{3}{4} =$$



Date _____

Generate equivalent fractions to get like units. Then, subtract.

a.
$$\frac{3}{4} - \frac{3}{10} =$$

b.
$$3\frac{1}{2} - 1\frac{1}{3} =$$



Name _____

Date _____

Subtract.

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

$$2. \quad 8\frac{3}{4} - 5\frac{5}{6} =$$



Name _____ Date _____

1. Circle the correct answer.

a.
$$\frac{1}{2} + \frac{5}{12}$$

greater than 1

less than 1

b.
$$2\frac{7}{8} - 1\frac{7}{9}$$

greater than 1

less than 1

c.
$$1\frac{1}{12} - \frac{7}{10}$$

greater than $\frac{1}{2}$

less than $\frac{1}{2}$

d.
$$\frac{3}{7} + \frac{1}{8}$$

greater than $\frac{1}{2}$

less than $\frac{1}{2}$

2. Use > , < , or = to make the following statement true.

$$4\frac{4}{5} + 3\frac{2}{3} - 8\frac{1}{2}$$

Name _____ Date _____

Fill in the blank to make the statement true.

1.
$$1\frac{3}{4} + \frac{1}{6} + \underline{} = 7\frac{1}{2}$$

2.
$$8\frac{4}{5} - \frac{2}{3} - \underline{} = 3\frac{1}{10}$$

Name	 Date	

Solve the word problem using the RDW strategy. Show all of your work.

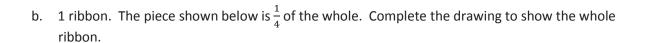
Cheryl bought a sandwich for $5\frac{1}{2}$ dollars and a drink for \$2.60. If she paid for her meal with a \$10 bill, how much money did she have left? Write your answer as a fraction and in dollars and cents.



Name	Date	

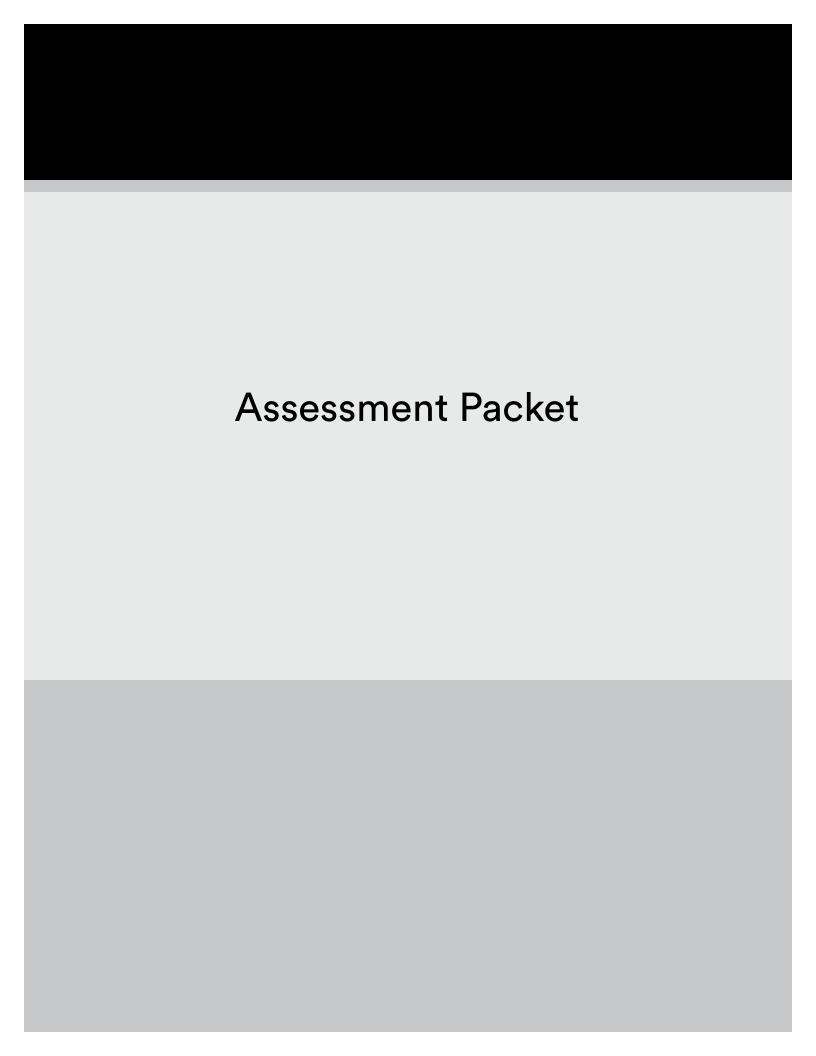
Draw the following ribbons.

a. 1 ribbon. The piece shown below is only $\frac{2}{3}$ of the whole. Complete the drawing to show the whole ribbon.



c. 3 ribbons, A, B, and C. 1 third of A is the same length as B. C is half as long as B. Draw a picture of the ribbons.





Name	Date	

- 1. Lila collected the honey from 3 of her beehives. From the first hive she collected $\frac{2}{3}$ gallon of honey. The last two hives yielded $\frac{1}{4}$ gallon each.
 - a. How many gallons of honey did Lila collect in all? Draw a diagram to support your answer.

b. After using some of the honey she collected for baking, Lila found that she only had $\frac{3}{4}$ gallon of honey left. How much honey did she use for baking? Support your answer using a diagram, numbers, and words.



Module 3: Addition and Subtraction of Fractions

c. With the remaining $\frac{3}{4}$ gallon of honey, Lila decided to bake some loaves of bread and several batches of cookies for her school bake sale. The bread needed $\frac{1}{6}$ gallon of honey and the cookies needed $\frac{1}{4}$ gallon. How much honey was left over? Support your answer using a diagram, numbers, and words.

d. Lila decided to make more baked goods for the bake sale. She used $\frac{1}{8}$ lb less flour to make bread than to make cookies. She used $\frac{1}{4}$ lb more flour to make cookies than to make brownies. If she used $\frac{1}{2}$ lb of flour to make the bread, how much flour did she use to make the brownies? Explain your answer using a diagram, numbers, and words.



Module 3: Addition and Subtraction of Fractions

Name	Date

- 1. On Sunday, Sheldon bought $4\frac{1}{2}$ kg of plant food. He used $1\frac{2}{3}$ kg on his strawberry plants and used $\frac{1}{4}$ kg for his tomato plants.
 - a. How many kilograms of plant food did Sheldon have left? Write one or more equations to show how you reached your answer.

b. Sheldon wants to feed his strawberry plants 2 more times and his tomato plants one more time. He will use the same amounts of plant food as before. How much plant food will he need? Does he have enough left to do so? Explain your answer using words, pictures, or numbers.



- 2. Sheldon harvests the strawberries and tomatoes in his garden.
 - a. He picks $1\frac{2}{5}$ kg less strawberries in the morning than in the afternoon. If Sheldon picks $2\frac{1}{4}$ kg in the morning, how many kilograms of strawberries does he pick in the afternoon? Explain your answer using words, pictures, or equations.

b. Sheldon also picks tomatoes from his garden. He picked $5\frac{3}{10}$ kg, but 1.5 kg were rotten and had to be thrown away. How many kilograms of tomatoes were not rotten? Write an equation that shows how you reached your answer.

c. After throwing away the rotten tomatoes, did Sheldon get more kilograms of strawberries or tomatoes? How many more kilograms? Explain your answer using an equation.

