Lesson 6

Sprint

Side A

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

Side B

1. $\frac{2}{5}$
2. $\frac{2}{5}$
3. $\frac{2}{3}$
4. $\frac{2}{3}$
5. $\frac{3}{4}$
6. $\frac{3}{4}$
7. $\frac{3}{5}$
8. $\frac{3}{5}$
9. $\frac{4}{5}$
10. $\frac{4}{5}$
11. $\frac{3}{8}$
12. $\frac{3}{8}$
13. $\frac{3}{10}$
14. $\frac{3}{10}$
15. $\frac{3}{3}$
16. 1
17. $\frac{4}{4}$
18. 1
19. $\frac{2}{2}$
20. 1
21. $\frac{4}{3}$
22. $\frac{4}{3}$
23. $\frac{3}{2}$
24. $\frac{3}{2}$
25. 5
26. $\frac{1}{6}$
27. $\frac{1}{8}$
28. 5
29. $\frac{1}{8}$
30. $\frac{1}{10}$
31. 7
32. 7
33. $\frac{1}{8}$
34. $\frac{1}{8}$
35. 6
36. 6
37. $\frac{5}{12}$
38. $\frac{6}{5}$
39. $\frac{1}{4}$
40. $\frac{9}{10}$
41. 3
42. $\frac{1}{4}$
43. $\frac{1}{5}$
44. $\frac{1}{4}, \frac{1}{4}, \frac{1}{4}, \frac{1}{4}$

Problem Set

1. a. 6; 1; 1; 6; $\frac{1}{6}$; $\frac{1}{6}$; 6; $\frac{1}{6}$; 6

   b. Decomposed horizontally to show tenths; $\frac{1}{5}+\frac{1}{5}=\left(\frac{1}{10}+\frac{1}{10}\right)+\left(\frac{1}{10}+\frac{1}{10}\right)=\frac{4}{10}$; $\left(\frac{1}{10}+\frac{1}{10}\right)+\left(\frac{1}{10}+\frac{1}{10}\right)=\left(2\times\frac{1}{10}\right)+\left(2\times\frac{1}{10}\right)$, $\frac{2}{5}=4\times\frac{1}{10}=\frac{4}{10}$

   c. Decomposed horizontally to show twelfths; $\frac{1}{4}+\frac{1}{4}+\frac{1}{4}=\left(\frac{1}{12}+\frac{1}{12}+\frac{1}{12}\right)+\left(\frac{1}{12}+\frac{1}{12}+\frac{1}{12}\right)+\left(\frac{1}{12}+\frac{1}{12}+\frac{1}{12}\right)=\frac{9}{12}$; $\left(\frac{1}{12}+\frac{1}{12}+\frac{1}{12}\right)+\left(\frac{1}{12}+\frac{1}{12}+\frac{1}{12}\right)+\left(\frac{1}{12}+\frac{1}{12}+\frac{1}{12}\right)=\left(3\times\frac{1}{12}\right)+\left(3\times\frac{1}{12}\right)+\left(3\times\frac{1}{12}\right)=\frac{9}{12}$, $\frac{3}{4}=9\times\frac{1}{12}=\frac{9}{12}$

2. a. Area model shows $\frac{3}{5}=\frac{6}{10}$; $\frac{3}{5}=\frac{1}{5}+\frac{1}{5}+\frac{1}{5}=\left(\frac{1}{10}+\frac{1}{10}\right)+\left(\frac{1}{10}+\frac{1}{10}\right)+\left(\frac{1}{10}+\frac{1}{10}\right)=\frac{6}{10}$, $\frac{3}{5}=\left(\frac{1}{10}+\frac{1}{10}\right)+\left(\frac{1}{10}+\frac{1}{10}\right)+\left(\frac{1}{10}+\frac{1}{10}\right)=\left(2\times\frac{1}{10}\right)+\left(2\times\frac{1}{10}\right)+\left(2\times\frac{1}{10}\right)=\frac{6}{10}$, $\frac{3}{5}=6\times\frac{1}{10}=\frac{6}{10}$

   b. Area model shows $\frac{3}{4}=\frac{6}{8}$; $\frac{3}{4}=\frac{1}{4}+\frac{1}{4}+\frac{1}{4}=\left(\frac{1}{8}+\frac{1}{8}\right)+\left(\frac{1}{8}+\frac{1}{8}\right)+\left(\frac{1}{8}+\frac{1}{8}\right)=\frac{6}{8}$, $\left(2\times\frac{1}{8}\right)+\left(2\times\frac{1}{8}\right)+\left(2\times\frac{1}{8}\right)=\frac{6}{8}$, $\frac{3}{4}=6\times\frac{1}{8}=\frac{6}{8}$

3. Answers will vary.

Exit Ticket

1. Decomposed horizontally to show eighths; $\frac{3}{4}=\frac{1}{4}+\frac{1}{4}+\frac{1}{4}=\left(\frac{1}{8}+\frac{1}{8}\right)+\left(\frac{1}{8}+\frac{1}{8}\right)+\left(\frac{1}{8}+\frac{1}{8}\right)=\frac{6}{8}$, $\left(2\times\frac{1}{8}\right)+\left(2\times\frac{1}{8}\right)+\left(2\times\frac{1}{8}\right)=\frac{6}{8}$, $\frac{3}{4}=6\times\frac{1}{8}=\frac{6}{8}$

2. Area model shows $\frac{4}{5}=\frac{8}{10}$

Homework

1. a. 4, 10, 1, 1, 10 , $\frac{1}{10}$, $\frac{1}{10}$, 10, $\frac{1}{10}$, 10

   b. Decomposed horizontally to show eighths; $\frac{1}{4}+\frac{1}{4}=\left(\frac{1}{8}+\frac{1}{8}\right)+\left(\frac{1}{8}+\frac{1}{8}\right)=\frac{4}{8},\left(\frac{1}{8}+\frac{1}{8}\right)+\left(\frac{1}{8}+\frac{1}{8}\right)=\left(2\times\frac{1}{8}\right)+\left(2\times\frac{1}{8}\right)=\frac{4}{8},\frac{2}{4}=4\times\frac{1}{8}=\frac{4}{8}$

   c. Decomposed horizontally to show fifteenths; $\frac{1}{5}+\frac{1}{5}+\frac{1}{5}+\frac{1}{5}=\left(\frac{1}{15}+\frac{1}{15}+\frac{1}{15}\right)+\left(\frac{1}{15}+\frac{1}{15}+\frac{1}{15}\right)+\left(\frac{1}{15}+\frac{1}{15}+\frac{1}{15}\right)+\left(\frac{1}{15}+\frac{1}{15}+\frac{1}{15}\right)=\frac{12}{15};\left(\frac{1}{15}+\frac{1}{15}+\frac{1}{15}\right)+\left(\frac{1}{15}+\frac{1}{15}+\frac{1}{15}\right)+\left(\frac{1}{15}+\frac{1}{15}+\frac{1}{15}\right)+\left(\frac{1}{15}+\frac{1}{15}+\frac{1}{15}\right)=\left(3\times\frac{1}{15}\right)+\left(3\times\frac{1}{15}\right)+\left(3\times\frac{1}{15}\right)+\left(3\times\frac{1}{15}\right)=\frac{12}{15},\frac{4}{5}=12\times\frac{1}{15}=\frac{12}{15}$

2. a. Area model shows $\frac{2}{3}=\frac{4}{6};\frac{1}{3}+\frac{1}{3}=\left(\frac{1}{6}+\frac{1}{6}\right)+\left(\frac{1}{6}+\frac{1}{6}\right)=\frac{4}{6},\left(\frac{1}{6}+\frac{1}{6}\right)+\left(\frac{1}{6}+\frac{1}{6}\right)=\left(2\times\frac{1}{6}\right)+\left(2\times\frac{1}{6}\right)=\frac{4}{6},\frac{2}{3}=4\times\frac{1}{6}=\frac{4}{6}$

   b. Area model shows $\frac{4}{5}=\frac{8}{10};\frac{1}{5}+\frac{1}{5}+\frac{1}{5}+\frac{1}{5}=\left(\frac{1}{10}+\frac{1}{10}\right)+\left(\frac{1}{10}+\frac{1}{10}\right)+\left(\frac{1}{10}+\frac{1}{10}\right)+\left(\frac{1}{10}+\frac{1}{10}\right)=\frac{8}{10},\left(\frac{1}{10}+\frac{1}{10}\right)+\left(\frac{1}{10}+\frac{1}{10}\right)+\left(\frac{1}{10}+\frac{1}{10}\right)+\left(\frac{1}{10}+\frac{1}{10}\right)=\left(2\times\frac{1}{10}\right)+\left(2\times\frac{1}{10}\right)+\left(2\times\frac{1}{10}\right)+\left(2\times\frac{1}{10}\right)=\frac{8}{10},\frac{4}{5}=8\times\frac{1}{10}=\frac{8}{10}$

3. Answers will vary.