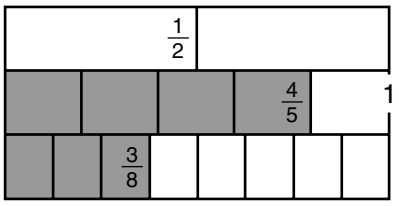
Name _____ Class _____ Date _____

Reteaching 4-1

Estimating Sums and Differences

Estimate sums and differences of fractions by using a benchmark. A *benchmark* is a number that is close to a fraction and is easy to use when you estimate.

Estimate: $\frac{4}{5} + \frac{3}{8}$ by using the benchmarks 0, $\frac{1}{2}$, or 1.



$\frac{4}{5} \approx 1$

$\frac{3}{8} \approx \frac{1}{2}$

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

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

Estimate sums and differences of mixed numbers by rounding to the nearest whole number.

Subtract: $3\frac{1}{6} - 1\frac{9}{10}$

$\frac{1}{6} \approx 0$
So, $3\frac{1}{6} \approx 3$.

$\frac{9}{10} \approx 1$
So, $1\frac{9}{10} \approx 2$.

$3 - 2 = 1$

$3\frac{1}{6} - 1\frac{9}{10} \approx 1$

Estimate each sum or difference. Use the benchmarks 0, $\frac{1}{2}$, and 1.

1. $\frac{7}{8} + \frac{1}{16}$ _____

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

3. $\frac{15}{16} - \frac{1}{9}$ _____

4. $\frac{5}{8} - \frac{3}{7}$ _____

5. $\frac{21}{25} + \frac{1}{6}$ _____

6. $\frac{1}{2} + \frac{1}{18}$ _____

7. $\frac{4}{10} - \frac{2}{15}$ _____

8. $\frac{6}{7} + \frac{4}{5}$ _____

9. $\frac{7}{10} + \frac{3}{24}$ _____

10. $\frac{5}{9} + \frac{1}{15}$ _____

11. $\frac{1}{10} + \frac{1}{8}$ _____

12. $\frac{1}{18} + \frac{2}{10}$ _____

13. $\frac{6}{7} + \frac{2}{3}$ _____

14. $\frac{11}{12} - \frac{9}{10}$ _____

15. $\frac{13}{14} - \frac{4}{7}$ _____

16. $6\frac{1}{8} + 2\frac{9}{10}$ _____

17. $1\frac{1}{5} - \frac{9}{10}$ _____

18. $3\frac{8}{9} + 4\frac{8}{9}$ _____

19. $8\frac{1}{12} - \frac{8}{10}$ _____

20. $5\frac{8}{9} + 3\frac{2}{13}$ _____

21. $6\frac{9}{11} - 1\frac{1}{8}$ _____

22. $12\frac{7}{8} - \frac{11}{12}$ _____

23. $9\frac{7}{9} - \frac{9}{10}$ _____

24. $15\frac{3}{8} + 1\frac{1}{9}$ _____

25. $17\frac{2}{7} + \frac{8}{11}$ _____

26. $7\frac{1}{4} - \frac{15}{16}$ _____

27. $5\frac{1}{8} + \frac{13}{16}$ _____

Solve.

28. Katrina has a $7\frac{1}{2}$-foot roll of ribbon. She needs 2 strips of ribbon that each measure $3\frac{5}{6}$-feet long. Does she need more ribbon?

_____

29. Ricardo jogs $3\frac{3}{4}$ miles on Monday and $2\frac{1}{5}$ miles on Wednesday. Estimate the total number of miles he jogs.

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