Visual Learning Animation

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In this problem, do the whole number parts need to change when finding equivalent fractions? [No; you can always add whole numbers without having to change them.]

Step 2

Add the fractions.

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

$+ 1\frac{1}{2} = + 1\frac{3}{6}$

$3\frac{7}{6}$

Why don't you add the whole-numbers first? [Sample response: Because you start with the lesser amounts when adding in case you have to regroup]

Step 3

Add the whole numbers. Simplify the sum if necessary.

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

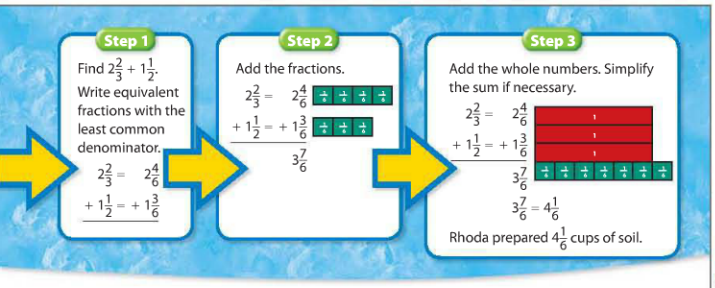
$+ 1\frac{1}{2} = + 1\frac{3}{6}$

$3\frac{7}{6}$

$3\frac{7}{6} = 4\frac{1}{6}$

Rhoda prepared $4\frac{1}{6}$ cups of soil.

Why is $3\frac{7}{6} = 4\frac{1}{6}$? [$3\frac{7}{6} = 3 + 1 + \frac{1}{6} = 4\frac{1}{6}$] Compare adding mixed numbers to adding fractions. [You add and simplify the fraction parts the same way. With mixed numbers, you must remember to add the whole-number parts.]



Independent Practice

Leveled Practice For **7** through **18**, find each sum. Simplify, if necessary. Estimate for reasonableness.

7. $3\frac{1}{6} + 5\frac{2}{3}$ = $3\frac{1}{6} + 5\frac{4}{6}$; $8\frac{5}{6}$

8. $11\frac{1}{2} + 10\frac{3}{5}$ = $11\frac{5}{10} + 10\frac{6}{10}$; $22\frac{1}{10}$

9. $9\frac{3}{16} + 7\frac{5}{8}$ $16\frac{13}{16}$

10. $5\frac{6}{7} + 8\frac{1}{7}$ 14

11. $4\frac{1}{10} + 6\frac{1}{2}$ $10\frac{3}{5}$

12. $9\frac{7}{12} + 4\frac{3}{4}$ $14\frac{1}{3}$

13. $5 + 3\frac{1}{8}$ $8\frac{1}{8}$

14. $8\frac{3}{4} + 7\frac{3}{4}$ $16\frac{1}{2}$

15. $2\frac{3}{4} + 7\frac{3}{5}$ $10\frac{7}{20}$

16. $3\frac{8}{9} + 8\frac{1}{2}$ $12\frac{7}{18}$

17. $1\frac{7}{12} + 2\frac{3}{8}$ $3\frac{23}{24}$

18. $3\frac{11}{12} + 9\frac{1}{16}$ $12\frac{47}{48}$

Problem Solving

19. Arnie skates $1\frac{3}{4}$ miles from home to the lake, then goes $1\frac{1}{3}$ miles around the lake, and then back home. How many miles did he skate?

A $2\frac{1}{12}$ miles

B $3\frac{1}{12}$ miles

C $4\frac{5}{6}$ miles

D $4\frac{5}{12}$ miles

20. a Use the map below to find the distance from the start of the trail to the end. $6\frac{17}{24}$ miles

b Louise walked from the start of the trail to the bird lookout and back. Did she walk more or less than if she had walked from the start of the trail to the end? More; $7\frac{3}{4} > 6\frac{17}{24}$

21. The length of a male Parsons chameleon can be up to $23\frac{1}{2}$ inches. It can extend its tongue up to $35\frac{1}{4}$ inches to catch its food. What is the total length of a male Parsons chameleon when its tongue is fully extended? $58\frac{3}{4}$ inches

3 Independent Practice

Remind students to write equivalent fractions, add the fractions, and then add the whole numbers and simplify. Use Exercise 11 as an example. *What are the equivalent fractions?* [$4\frac{1}{10}$ and $6\frac{5}{10}$] *What is the sum of the fractions?* [$\frac{6}{10}$] *What is the sum of the whole numbers?* [10] *What is the sum of the mixed numbers?* [$10\frac{6}{10}$, or $10\frac{3}{5}$]

Problem Solving

Exercise	Content
19	Adding Mixed Numbers ($1\frac{3}{4} + 1\frac{1}{3} + 1\frac{3}{4}$)
20a	Adding Mixed Numbers ($2\frac{5}{6} + 3\frac{7}{8}$)
20b	Compare Sums of Mixed Numbers ($3\frac{7}{8} + 3\frac{7}{8}$; $2\frac{5}{6} + 3\frac{7}{8}$)
21	Adding Mixed Numbers ($23\frac{1}{2} + 35\frac{1}{4}$)

Students use underlying processes and mathematical tools for Exercises 19–21. Remind students to check for reasonableness when solving each problem.

Exercise 19

Test-Taking Tip: Understand the Question Remind students to look for important words. *Note that the problem is asking for how many miles Arnie skated.*

Early Finishers *Look at Exercise 20. If Louise walked from the bird lookout to the end of the trail and back, how many miles did she walk?* [$5\frac{2}{3}$ miles]