Name _____ Practice Video Tools Games

Additional Practice 7-6
Estimate Sums and Differences of Mixed Numbers

Another Look!

Kyra has $4\frac{1}{8}$ yards of red ribbon and $7\frac{2}{3}$ yards of blue ribbon. About how many yards of ribbon does she have?

Round both numbers to the nearest whole number. Then add or subtract.

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

$4\frac{1}{8}$ rounds to 4.

$7\frac{2}{3}$ rounds to 8.

$4 + 8 = 12$

So, $4\frac{1}{8} + 7\frac{2}{3}$ is about 12.

Kyra has about 12 yards of ribbon.

If the fractional part of a mixed number is greater than or equal to $\frac{1}{2}$, round to the next greater whole number. If it is less than $\frac{1}{2}$, use only the whole number.

In **1–8**, round to the nearest whole number.

1. $8\frac{5}{6}$ **9**

2. $13\frac{8}{9}$ **14**

3. $43\frac{1}{3}$ **43**

4. $6\frac{6}{7}$ **7**

5. $7\frac{40}{81}$ **7**

6. $29\frac{4}{5}$ **30**

7. $88\frac{2}{4}$ **89**

8. $20\frac{3}{10}$ **20**

In **9–17**, estimate each sum or difference. **Sample answers are given.**

9. $7\frac{1}{9} + 8\frac{2}{5}$ **15**

10. $14\frac{5}{8} - 3\frac{7}{10}$ **11**

11. $2\frac{1}{4} + 5\frac{1}{2} + 10\frac{3}{4}$ **19**

12. $11\frac{3}{5} - 4\frac{1}{12}$ **8**

13. $9 + 3\frac{11}{14} + 5\frac{1}{9}$ **18**

14. $15\frac{6}{7} - 12\frac{2}{10}$ **4**

15. $3\frac{2}{5} + 6\frac{5}{7}$ **10**

16. $20\frac{1}{3} - 9\frac{1}{2}$ **10**

17. $25\frac{7}{8} + 8\frac{7}{12}$ **35**

Use the table for **18–20**.

DATA

Participant	Event	Distance
Robert	Long Jump	**1.** $6\frac{1}{12}$ ft **2.** $5\frac{2}{3}$ ft
	Softball Throw	$62\frac{1}{5}$ ft
May	Long Jump	**1.** $4\frac{2}{3}$ ft **2.** $4\frac{3}{4}$ ft
	Softball Throw	$71\frac{7}{8}$ ft

18. **Critique Reasoning** Robert says his better long jump was about 1 foot farther than May's better long jump. Is he correct? Explain.

Yes, the difference is about 1 ft: $6\frac{1}{12} - 4\frac{3}{4} \approx 6 - 5$, or 1.

19. If the school record for the softball throw is 78 feet, about how much farther must Robert throw the ball to match the record?

About 16 feet farther

20. About how much farther is May's softball throw than Robert's softball throw?

About 10 feet farther

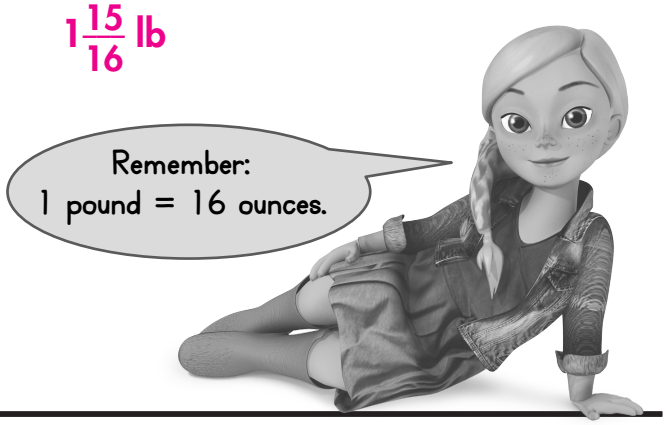
---

21. **Higher Order Thinking** Use the problem $\frac{3}{5} + \frac{3}{4}$. First, round each fraction and estimate the sum. Then, add the two fractions using a common denominator and round the result. Which is closer to the actual sum?

$1 + 1 = 2$; $\frac{12}{20} + \frac{15}{20} = \frac{27}{20} = 1\frac{7}{20}$; $1\frac{7}{20}$ rounds to 1; The second way is closer to the actual answer.

22. To make one batch of granola, Linda mixes 1 pound of oat flakes, 6 ounces of walnuts, 5 ounces of raisins, and 4 ounces of sunflower seeds. How many pounds of granola does one batch make?

$1\frac{15}{16}$ lb



Assessment Practice

23. Clay's hair is $10\frac{2}{7}$ inches long. The barber trims off $\frac{1}{4}$ inch. About how long is his hair now?

Ⓐ 9 in.

Ⓑ 10 in.

Ⓒ 11 in.

Ⓓ 12 in.

24. Tom and Sami have two painting jobs but can only stop at the store once. The first job needs $1\frac{4}{5}$ gallons of paint. The second needs $12\frac{1}{3}$ gallons. How many gallon cans of paint should they buy?

Ⓐ 11 cans

Ⓑ 13 cans

Ⓒ 14 cans

Ⓓ 15 cans

Copyright © Savvas Learning Company LLC. All Rights Reserved.