## REVIEW: Adding and Subtracting Mixed Numbers

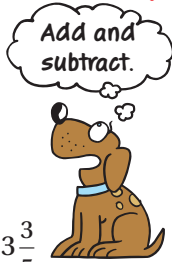### Key Concept and Vocabulary

$$2\frac{2}{3} + 1\frac{2}{3} = (2+1) + \left(\frac{2}{3} + \frac{2}{3}\right)$$

Add and subtract.
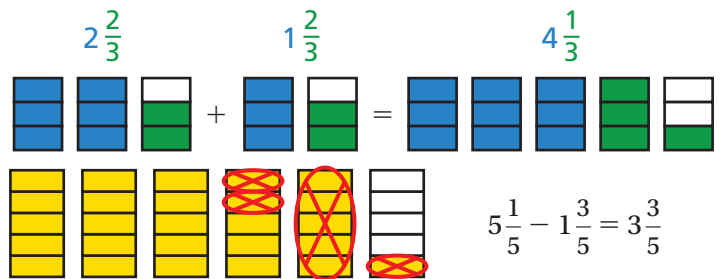
$$= 3\frac{4}{3} = 4\frac{1}{3}$$

$$5\frac{1}{5} - 1\frac{3}{5} = 4\frac{6}{5} - 1\frac{3}{5}$$

$$= (4-1) + \left(\frac{6}{5} - \frac{3}{5}\right) = 3\frac{3}{5}$$

### Visual Models



$2\frac{2}{3}$   $1\frac{2}{3}$   $4\frac{1}{3}$

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

### Skill Examples

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

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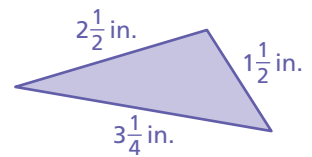
3. $4\frac{1}{3} - 1\frac{2}{3} = 3\frac{4}{3} - 1\frac{2}{3} = 2\frac{2}{3}$

4. $5\frac{5}{6} - 3\frac{1}{3} = 5\frac{5}{6} - 3\frac{2}{6} = 2\frac{3}{6} = 2\frac{1}{2}$

### Application Example

5. Find the perimeter of the triangle.

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

$2\frac{1}{2}$ in.   $1\frac{1}{2}$ in.   $3\frac{1}{4}$ in.

∴ The perimeter is $7\frac{1}{4}$ inches.

## PRACTICE MAKES *PURR*-FECT®

*Check your answers at BigIdeasMath.com.*

**Find the sum or difference. Write your answer in simplest form.**

6. $4\frac{1}{4} + 2\frac{1}{4} = $ _____

7. $1\frac{2}{5} + 3\frac{1}{5} = $ _____

8. $5\frac{4}{5} + 3\frac{4}{5} = $ _____

9. $2\frac{2}{3} + 4\frac{1}{6} = $ _____

10. $7\frac{2}{3} + 3\frac{1}{3} = $ _____

11. $5\frac{1}{2} + 5\frac{1}{2} = $ _____

12. $8\frac{3}{5} - 5\frac{3}{5} = $ _____

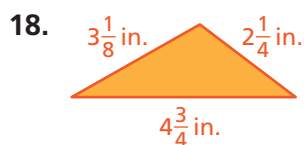13. $4\frac{2}{3} - 1\frac{1}{3} = $ _____

14. $3\frac{1}{4} - 2\frac{1}{2} = $ _____
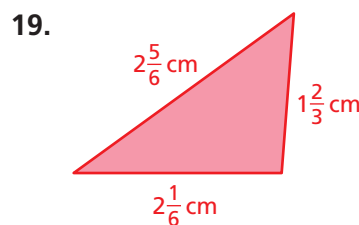
15. $7\frac{1}{6} - 3\frac{1}{3} = $ _____

16. $1\frac{1}{4} - \frac{1}{2} = $ _____

17. $6\frac{3}{4} - 6\frac{1}{2} = $ _____

**Find the perimeter of the triangle.**

18.



$3\frac{1}{8}$ in.   $2\frac{1}{4}$ in.   $4\frac{3}{4}$ in.

Perimeter = _____

19.



$2\frac{5}{6}$ cm   $1\frac{2}{3}$ cm   $2\frac{1}{6}$ cm

Perimeter = _____

20. **HEIGHT** Sarah was $50\frac{1}{4}$ inches tall when she was 12 years old. She was $48\frac{1}{2}$ inches tall when she was 11 years old. How much did she grow during the year? _____

21. **PAINT** You use $2\frac{3}{4}$ cups of blue paint and $2\frac{3}{4}$ cups of yellow paint to make green paint. How many cups of green paint do you make? _____