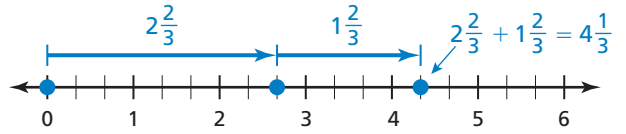Name _____

Key Concept and Vocabulary

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

Add and subtract.

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

Visual Model

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

Skill Examples

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

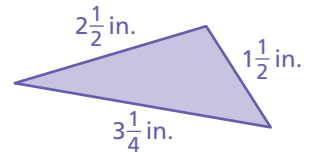**2.** $5\frac{3}{5} + 1\frac{4}{5} = 6\frac{7}{5} = 7\frac{2}{5}$

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

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

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 simplified form.

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

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

8. $5\frac{4}{5} + 3\frac{4}{5} = \underline{9\frac{3}{5}}$

9. $2\frac{2}{3} + 4\frac{1}{6} = \underline{6\frac{5}{6}}$

10. $7\frac{2}{3} + 3\frac{1}{3} = \underline{11}$

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

12. $3\frac{1}{4} - 2\frac{1}{2} = \underline{\frac{3}{4}}$

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

14. $8\frac{3}{5} - 5\frac{3}{5} = \underline{3}$

15. $7\frac{1}{6} - 3\frac{1}{3} = \underline{3\frac{5}{6}}$

16. $1\frac{1}{4} - \frac{1}{2} = \underline{\frac{3}{4}}$

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

Find the perimeter of the triangle.

18.

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

Perimeter = $\underline{10\frac{1}{8}}$ in.

19.

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

Perimeter = $\underline{6\frac{2}{3}}$ cm

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? _____ $1\frac{3}{4}$ in.

21. **NUMBER LINE** Show the sum graphically on the number line: $3\frac{1}{4} + 2\frac{1}{2}$.

$3\frac{1}{4}$ $2\frac{1}{2}$ $5\frac{3}{4}$