REVIEW: Adding and Subtracting Fractions with Unlike Denominators

Name _____

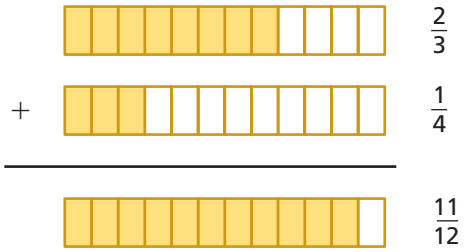
Key Concept and Vocabulary

Find products.

$\frac{2}{3} \times \frac{1}{4} = \frac{2 \cdot 4 + 3 \cdot 1}{3 \cdot 4} = \frac{11}{12}$

$\frac{2}{3} \times \frac{1}{4} = \frac{2 \cdot 4 - 3 \cdot 1}{3 \cdot 4} = \frac{5}{12}$

Visual Model



Skill Examples

1. $\frac{1}{5} + \frac{2}{3} = \frac{1 \cdot 3 + 5 \cdot 2}{5 \cdot 3} = \frac{13}{15}$
2. $\frac{1}{2} + \frac{1}{4} = \frac{1 \cdot 4 + 2 \cdot 1}{2 \cdot 4} = \frac{6}{8} = \frac{3}{4}$
3. $\frac{1}{3} - \frac{1}{4} = \frac{1 \cdot 4 - 3 \cdot 1}{3 \cdot 4} = \frac{1}{12}$
4. $\frac{3}{7} - \frac{2}{5} = \frac{3 \cdot 5 - 7 \cdot 2}{7 \cdot 5} = \frac{1}{35}$

Application Example

5. You ride your bike $\frac{3}{8}$ mile to the store. Then you ride $\frac{1}{6}$ mile to school. How far do you ride altogether?

$\frac{3}{8} + \frac{1}{6} = \frac{3 \cdot 6 + 8 \cdot 1}{8 \cdot 6} = \frac{26}{48} = \frac{13}{24}$

You ride $\frac{13}{24}$ mile.

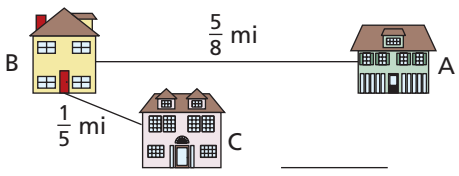
PRACTICE MAKES *PURR*-FECT™

Check your answers at BigIdeasMath.com.

Find the sum or difference. Write your answer in simplified form.

6. $\frac{1}{3} + \frac{1}{8} =$ _____
7. $\frac{2}{3} + \frac{1}{5} =$ _____
8. $\frac{3}{10} + \frac{1}{4} =$ _____
9. $\frac{1}{2} + \frac{2}{5} =$ _____
10. $\frac{3}{7} + \frac{1}{3} =$ _____
11. $\frac{1}{8} + \frac{2}{5} =$ _____
12. $\frac{5}{8} - \frac{1}{3} =$ _____
13. $\frac{5}{6} - \frac{3}{5} =$ _____
14. $\frac{5}{9} - \frac{2}{5} =$ _____
15. $\frac{7}{10} - \frac{1}{4} =$ _____
16. $\frac{3}{5} - \frac{1}{6} =$ _____
17. $\frac{1}{5} - \frac{1}{6} =$ _____

Find the total distance from House A to House B and then to House C.

18. 

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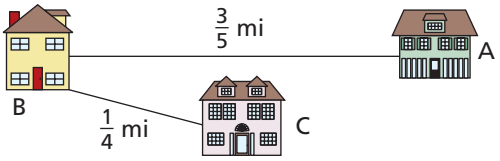
19. 

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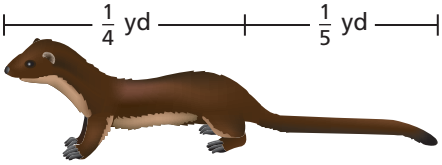
20. **WEASEL LENGTH** Find the total length of the weasel. _____



21. **IMPROVING YOUR SPEED** You swam at a rate of $\frac{3}{8}$ mile per hour in March. You swam at a rate of $\frac{3}{7}$ mile per hour in April. How much faster did you swim in April? _____