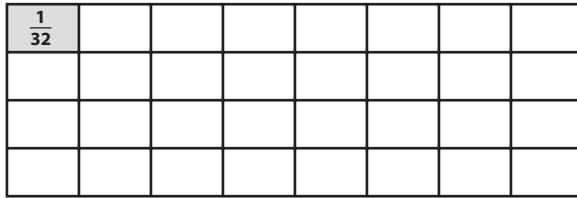


2ACE Exercises 5, 6, 14–17

Investigation 2

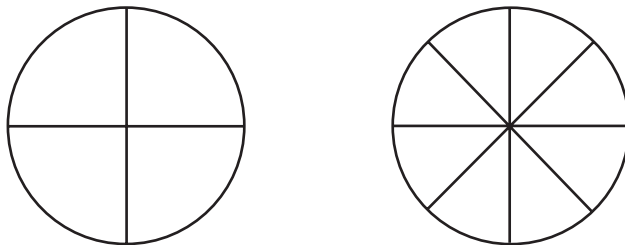
Bits and Pieces II

5. Rico and his friend eat part of a pan of lasagna (see below). Rico eats $\frac{1}{16}$ of the lasagna, and his friend eats $\frac{1}{32}$ of the lasagna. How much of the lasagna is left?



HINT $\frac{1}{32}$ has been filled in, fill in $\frac{1}{16}$.

6. Suppose you eat $\frac{3}{4}$ of a pizza and then eat $\frac{1}{8}$ of another pizza of the same size.
How much of a whole pizza do you eat altogether?



HINT Show (shade) $\frac{3}{4}$ and $\frac{1}{8}$ on the pizzas at the left.

For Exercises 14–17, determine which sum is greater. Show your work.

14. $\frac{2}{3} + \frac{5}{6}$ or $\frac{3}{4} + \frac{4}{5}$

Find common denominators.

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

$$\frac{3}{4} = \frac{15}{20} \text{ \& } \frac{4}{5} = \frac{16}{20}$$

Add.

$$\frac{4}{6} + \frac{5}{6} = \frac{9}{6}$$

$$\frac{15}{20} + \frac{16}{20} = \frac{31}{20}$$

Because you want to compare $\frac{9}{6}$ and $\frac{31}{20}$, you will want to find a **common multiple** of these two numbers. Both 6 and 20 are factors of 60 ($6 \times 10 = 60$ and $20 \times 3 = 60$). 60 is the **smallest common multiple** of 6 and 20.

You want to rewrite the sums you are comparing ($\frac{9}{6}$ and $\frac{31}{20}$) using the common denominator of 60.

$$\frac{9}{6} = \frac{90}{60} \text{ (} 6 \times 10 = 60 \text{ and } 9 \times 10 = 90 \text{)}$$

$$\frac{31}{20} = \frac{93}{60} \text{ (} 20 \times 3 = 60 \text{ and } 31 \times 3 = 93 \text{)}$$

2ACE Exercises 5, 6, 14–17 (continued)**Investigation 2****Bits and Pieces II**

When you write the sums in terms of their common denominator you have

$$\frac{90}{60} \text{ and } \frac{93}{60} .$$

Then compare $\frac{90}{60}$ and $\frac{93}{60}$. $\frac{93}{60}$ is larger.

So, the sum of $\frac{3}{4} + \frac{4}{5}$ is larger.

15. $\frac{7}{6} - \frac{2}{3}$ or $\frac{3}{5} - \frac{5}{10}$

16. $\frac{1}{4} + \frac{5}{6}$ or $\frac{1}{5} + \frac{7}{8}$

17. $\frac{1}{16} + \frac{1}{12}$ or $\frac{5}{4} - \frac{4}{5}$