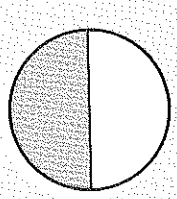
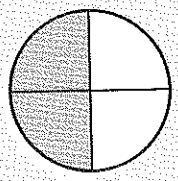
Exercise 2

Reducing to Lowest Terms

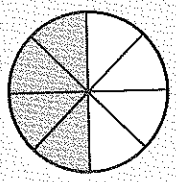
Fractions that name the same amount are **equivalent.** For example, $\frac{1}{2}$, $\frac{2}{4}$, and $\frac{4}{8}$ are equivalent fractions. They name the same shaded part in these three circles.



$\frac{1}{2}$



$\frac{2}{4}$



$\frac{4}{8}$

Reduce a fraction by dividing the numerator and the denominator by a number that goes into both evenly. When 1 is the only number that divides evenly into both, the fraction is in **lowest terms.**

Reduce $\frac{9}{12}$. **Divide the numerator and denominator by 3.** $\frac{9 \div 3}{12 \div 3} = \frac{3}{4}$

Reduce to lowest terms.

1. $\frac{2}{20}$ **2.** $\frac{4}{20}$ **3.** $\frac{12}{24}$ **4.** $\frac{6}{8}$

5. $\frac{10}{30}$ **6.** $\frac{6}{15}$ **7.** $\frac{8}{16}$ **8.** $\frac{4}{6}$

9. $\frac{9}{15}$ **10.** $\frac{10}{20}$ **11.** $\frac{30}{100}$ **12.** $\frac{200}{800}$

13. $\frac{24}{200}$ **14.** $\frac{56}{104}$ **15.** $\frac{72}{120}$ **16.** $\frac{135}{270}$

Reduce the fractions to lowest terms. Are the pairs equivalent? Write *yes* or *no*.

17. $\frac{1}{2}$ and $\frac{3}{4}$ _____ **18.** $\frac{2}{3}$ and $\frac{4}{6}$ _____ **19.** $\frac{1}{3}$ and $\frac{4}{12}$ _____

20. $\frac{2}{5}$ and $\frac{4}{5}$ _____ **21.** $\frac{5}{6}$ and $\frac{10}{12}$ _____ **22.** $\frac{1}{4}$ and $\frac{2}{4}$ _____

23. $\frac{3}{4}$ and $\frac{6}{8}$ _____ **24.** $\frac{3}{9}$ and $\frac{6}{18}$ _____ **25.** $\frac{5}{8}$ and $\frac{10}{16}$ _____

26. $\frac{15}{16}$ and $\frac{30}{48}$ _____ **27.** $\frac{15}{32}$ and $\frac{5}{6}$ _____ **28.** $\frac{96}{256}$ and $\frac{6}{16}$ _____

Directions: Choose the one best answer to each item. Circle the number of the correct answer.

29. Look at the table below. It shows the amount of rain that fell during a full week of stormy weather. On which two days did the same amount of rain fall?

DAY	RAINFALL
Monday	$\frac{1}{4}$ inch
Tuesday	$\frac{2}{10}$ inch
Wednesday	$\frac{2}{8}$ inch
Thursday	$\frac{4}{5}$ inch
Friday	$\frac{2}{4}$ inch

(1) Monday and Friday
(2) Tuesday and Wednesday
(3) Wednesday and Friday
(4) Thursday and Friday
(5) Monday and Wednesday

30. Mr. Simmons spends about $\frac{2}{6}$ of his time traveling on business. Which fraction represents the amount of time he is traveling?

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

31. A retired couple spends $\frac{4}{12}$ of the year at their home in Maine. What fraction of the calendar do they spend in Maine?

(1) $\frac{1}{12}$
(2) $\frac{2}{4}$
(3) $\frac{3}{12}$
(4) $\frac{1}{4}$
(5) $\frac{1}{3}$

32. During a rainstorm, $\frac{4}{10}$ inch of rain fell. What is this amount in lowest terms?

(1) $\frac{4}{10}$
(2) $\frac{2}{5}$
(3) $\frac{2}{10}$
(4) $\frac{4}{5}$
(5) $\frac{1}{10}$

33. Two dimes are $\frac{20}{100}$ of a dollar. What is this fraction in lowest terms?

(1) $\frac{20}{100}$
(2) $\frac{2}{10}$
(3) $\frac{1}{5}$
(4) $\frac{2}{5}$
(5) $\frac{1}{10}$

34. Roger works $\frac{8}{12}$ of the year in Florida. What is this fraction in lowest terms?

(1) $\frac{12}{8}$
(2) $\frac{2}{3}$
(3) $\frac{8}{12}$
(4) $\frac{2}{12}$
(5) $\frac{8}{3}$

35. Carolyn is training for a 10K race. So far, she can run $\frac{8}{10}$ of the total course. What is this fraction in lowest terms?

(1) $\frac{2}{5}$
(2) $\frac{8}{10}$
(3) $\frac{2}{10}$
(4) $\frac{4}{5}$
(5) $\frac{5}{8}$