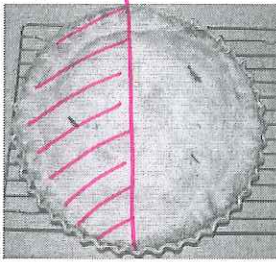


Introduction to Fractions - Practice

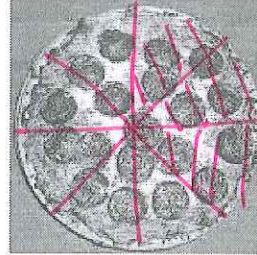
Name _____

Divide the object into the given fractions. Then shade the fraction listed.

1. Halves, $\frac{1}{2}$



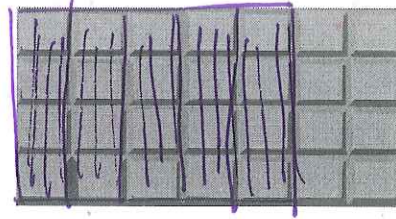
2. Eighths, $\frac{3}{8}$



3. Fourths, $\frac{3}{4}$



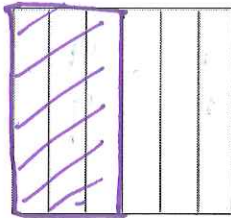
4. Sevenths, $\frac{5}{7}$



7 columns

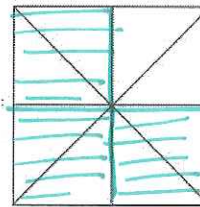
Shade the figure so that it represents the given fraction. Then write the corresponding equivalent fraction.

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



6. $\frac{3}{4} = \frac{6}{8}$

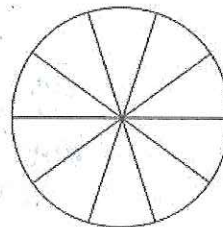
$\frac{3 \cdot 2}{4 \cdot 2} = \frac{6}{8}$



7. $\frac{2}{3} =$



8. $\frac{4}{5} =$



Build each fraction to make an equivalent fraction with the given denominator. Multiply the numerator and the denominator by the same number.

$$9. \frac{1}{2} \cdot \frac{\boxed{5}}{\boxed{5}} = \frac{\boxed{5}}{10}$$

↑
must be
same

$$10. \frac{3}{4} \cdot \frac{\boxed{3}}{\boxed{3}} = \frac{\boxed{9}}{12}$$

$$11. \frac{2}{5} \cdot \frac{\boxed{4}}{\boxed{4}} = \frac{\boxed{8}}{20}$$

$$12. \frac{6}{7} \cdot \frac{\boxed{6}}{\boxed{6}} = \frac{\boxed{36}}{42}$$

$$13. \frac{3}{2} \cdot \frac{\boxed{9}}{\boxed{9}} = \frac{\boxed{27}}{18}$$

$$14. -\frac{5}{12} \cdot \frac{\boxed{3}}{\boxed{3}} = -\frac{\boxed{15}}{36}$$

Reduce each fraction to lowest terms. Divide a common factor out of the numerator and denominator.

$$15. \frac{2 \div 2}{4 \div 2} = \frac{1}{2}$$

$$16. \frac{15 \div 5}{30 \div 5} = \frac{3 \div 3}{6 \div 3} = \frac{1}{2}$$

$$17. \frac{30 \div 2}{48 \div 2} = \frac{15 \div 3}{24 \div 3} = \frac{5}{8}$$

$$\frac{15 \div 3}{30 \div 3} = \frac{5 \div 5}{10 \div 5} = \frac{1}{2}$$

$$18. \frac{15 \div 15}{45 \div 15} = \frac{1}{3}$$

$$19. \frac{14 \div 2}{36 \div 2} = \frac{7}{18}$$

$$20. -\frac{16 \div 2}{48 \div 2} = -\frac{8 \div 8}{24 \div 8} = -\frac{1}{3}$$

Simplify each fraction or state that it cannot be simplified.

$$21. \frac{8}{15} = \frac{8}{15}$$

cannot be
simplified

$$22. -\frac{2 \div 2}{42 \div 2} = -\frac{1}{21}$$

$$23. \frac{16 \div 4}{36 \div 4} = \frac{4}{9}$$

$$24. \frac{48 \div 2}{82 \div 2} = \frac{24}{41}$$

$$25. \frac{49 \div 7}{7 \div 7} = \frac{7}{1} = 7$$

↑
improper
fraction

↑
whole

$$26. \frac{96 \div 2}{102 \div 2} = -\frac{48 \div 3}{51 \div 3} = -\frac{16}{17}$$

$$\begin{array}{r} 16 \\ 3 \overline{)48} \\ \underline{3} \\ 18 \end{array}$$

When a fraction is negative we can write the negative sign in front of the fraction, on the numerator or on the denominator. Write each fraction in two other ways.

$$\frac{-2}{-3} = \frac{2}{3}$$

27. $-\frac{3}{4}$
 $= \frac{-3}{4} = \frac{3}{-4}$

28. $\frac{-6}{5}$
 $= -\frac{6}{5} = \frac{6}{-5}$

29. $\frac{2}{-3}$
 $= -\frac{2}{3} = \frac{2}{-3}$

It is easier to compare fractions when the denominators are the same. Build one of the fractions so they have the same denominator. Then write $>$, $<$ or $=$ to make a true statement.

$<$ "L"
less than

30. $\frac{2}{5} \square \frac{3}{10}$
 $\frac{4}{10} \square > \frac{3}{10}$
 greater than

31. $\frac{1}{3} \square \frac{5}{12}$
 $\frac{4}{12} \square < \frac{5}{12}$

32. $\frac{15}{18} \square \frac{5 \cdot 3}{6 \cdot 3}$
 $\frac{15}{18} \square = \frac{15}{18}$

33. Build each fraction to a common denominator of 45, then write from smallest to largest: $\frac{4}{9}, \frac{3}{5}, \frac{2}{15}, \frac{1}{3}$

$$\frac{4 \cdot 5}{9 \cdot 5} = \frac{20}{45}$$

$$\frac{3 \cdot 9}{5 \cdot 9} = \frac{27}{45}$$

$$\frac{2 \cdot 3}{15 \cdot 3} = \frac{6}{45}$$

$$\frac{1 \cdot 15}{3 \cdot 15} = \frac{15}{45}$$

$$\frac{6}{45} > \frac{15}{45} > \frac{20}{45} > \frac{27}{45}$$

$$\frac{2}{15} > \frac{1}{3} > \frac{4}{9} > \frac{3}{5}$$

Draw a line and label where the fraction belongs on the number line. (Hint: Divide the number line into equal sections)

3 equal pieces

