Name: __Loz__   Date: __11-30-20__

Worksheet 5   Real-World Problems: Multiplying with Mixed Numbers

Solve. Show your work.

1. Juan has 8 rabbits. He wants to give $1\frac{1}{4}$ carrots to each rabbit.

    How many carrots does Juan need?

    __8__ × __$1\frac{1}{4}$__ = __10__

    $$1\frac{1}{4} = \frac{5}{4}$$

    Juan needs __10__ carrots.

    $$\frac{8}{1} \times \frac{5}{4} = \frac{40}{4} = \frac{10}{1} = 10$$

    $8 \times 1 = 8$ $\frac{5}{4} \times 8 = 2 = 8 + 2 = 10$

2. Mr. Foster buys 7 boxes of cornflakes. Each box weighs $13\frac{1}{2}$ ounces.

    Find the total weight of the cornflakes.

    $$\frac{7}{1} \times \frac{27}{2} = \frac{189}{2}$$

    $$13\frac{1}{2} = \frac{27}{2}$$

    $$\frac{189 \div 2 = 94\frac{1}{2}}{2 \quad 1}$$

    the total weight

    Of the cornflakes is $94\frac{1}{2}$ ounces.

Solve. Show your work.

3.   A rectangular envelope is 8 inches wide and $4\frac{1}{3}$ inches long.

Find the area of the envelope.

> Area of a rectangle
> = length × width

$4\frac{1}{3} = \frac{13}{3}$

$104 \div 3 = 34\frac{2}{3}$

$\frac{8}{1} \times \frac{13}{3} = \frac{104}{3}$

the area
of the envelope is
$34\frac{2}{3}$ inches

— 2 pts

4.   A carpenter bought 4 boxes of nails. Each box weighed $3\frac{2}{5}$ pounds.
The price of the nails was \$8 per pound. How much did the carpenter
pay for the nails?

$3\frac{2}{5} = \frac{17}{5}$

64 pounds

$\frac{2}{5} = \frac{40}{100} = .40$

$\frac{4}{1} \times \frac{17}{5} = \frac{64}{5}$ ✗

the carpenter
payed \$102.40

Check your math on the 1st step →

$\begin{array}{r} {}^{5}64 \\ \times\ 8 \\ \hline \$512 \end{array}$

$\frac{64}{5} \times \frac{8}{1} = \frac{512}{5}$ for the nails

$\frac{512}{5} = 102\frac{2}{5} = 102.40$
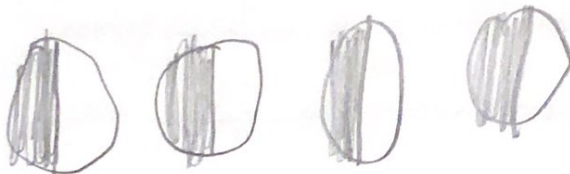
Name: _LOZ_   **Date:** _11-30-20_

Complete.

8.   There are ___2___ $\frac{1}{2}$s in 1 whole.

9.   There are ___4___ $\frac{1}{2}$s in 2 wholes.

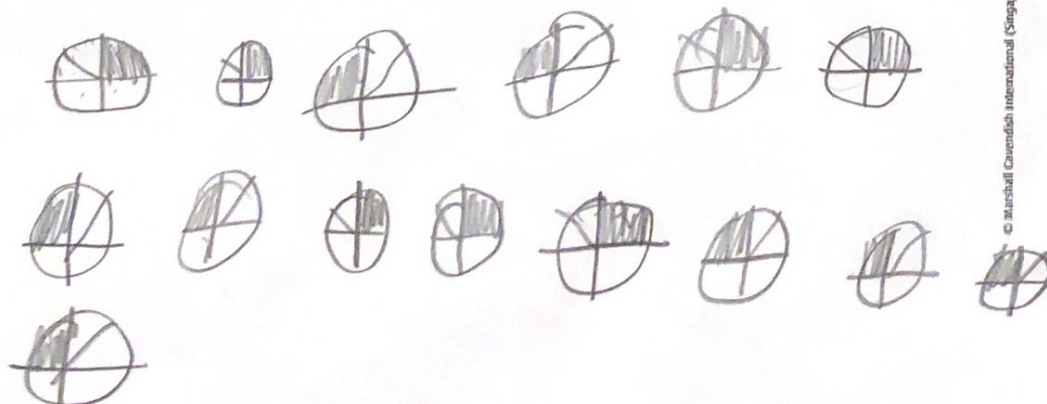10.   Draw 2 wholes made from $\frac{1}{2}$ circles.

Complete.

11.   There are ___5___ $\frac{1}{5}$s in 1 whole.

12.   There are ___15___ $\frac{1}{5}$s in 3 wholes.

13.   Draw 3 wholes made from $\frac{1}{5}$ circles.

Complete each statement.

28. If each child receives $\frac{1}{4}$ of an apple,

    a. one apple can be shared among ____4____ children.

    b. two apples can be shared among ____8____ children.

29. If each child drinks $\frac{1}{8}$ liter of milk,

    a. one liter of milk can be shared among ____8____ children.

    b. three liters of milk can be shared among ____24____ children.

30. If each gift can be wrapped using $\frac{1}{3}$ of a piece of wrapping paper,

    a. each piece of paper can be used to wrap ____3____ gifts.

    b. two pieces of paper can be used to wrap ____6____ gifts.

    c. five pieces of paper can be used to wrap ____15____ gifts.

Name: LO2

Divide.

10. $4 \div \frac{1}{2} = 8$

11. $6 \div \frac{1}{4} = 24$

12. $5 \div \frac{1}{3} = 15$

13. $2 \div \frac{1}{5} = 10$

14. $2 \div \frac{1}{6} = 12$

15. $3 \div \frac{1}{8} = 24$

16. $3 \div \frac{1}{7} = 21$

17. $4 \div \frac{1}{9} = 36$

Solve. Show your work.

18. A bottle contains $\frac{5}{12}$ gallon of paint. Mr. Jacobs pours all the paint
     equally into 5 pots. How much paint is there in each pot?

$$\frac{5}{12} \div \frac{5}{1} = \frac{1}{12}$$

$$\frac{\cancel{5}}{12} \cdot \frac{1}{\cancel{5}_1} = \frac{1}{12}$$

there is $\frac{1}{12}$ gallon of

Paint in each

Pot.

19. During lunch, $\frac{1}{2}$ of a loaf of bread is shared equally among 5 girls.
     What fraction of the loaf of bread does each girl have?

$$\frac{1}{2} \div \frac{5}{1} = 5 \cdot .5$$

$$\frac{1}{2} \cdot \frac{1}{5} = \frac{1}{10}$$

Each girl has $\frac{1}{10}$ loaf of the

bread.