## NS3-83: Sharing and Fractions

Richard has 6 cookies. He wants to give $\frac{1}{3}$ of his cookies to a friend.
To do so, he shares the cookies equally onto 3 plates.


There are 3 equal groups, so each group is $\frac{1}{3}$ of 6 . There are 2 cookies in each group, so $\frac{1}{3}$ of 6 is 2 .

1. How many plates should Richard use to divide his cookies if he wants to give away ...
a) ... $\frac{1}{2}$ of his cookies.
b) ... $\frac{1}{4}$ of his cookies.
c) $\ldots \frac{1}{5}$ of his cookies.
$\qquad$ plates $\qquad$ plates $\qquad$ plates
2. Find the fraction of the whole amount by sharing the cookies equally. The first one is started for you. HINT: Draw the correct number of plates then place the cookies one at a time.
a) Find $\frac{1}{4}$ of 8 cookies.
 $\frac{1}{4}$ of 8 is $\qquad$
b) Find $\frac{1}{2}$ of 10 cookies. $\frac{1}{2}$ of 10 is $\qquad$
c) Find $\frac{1}{2}$ of 4 cookies.
d) Find $\frac{1}{3}$ of 9 cookies. $\frac{1}{2}$ of 4 is $\qquad$

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\frac{1}{3} \text { of } 9 \text { is }
$$

$\qquad$
3. By drawing circles and dots, find ...
a) $\frac{1}{3}$ of 12
b) $\frac{1}{2}$ of 8 $\frac{1}{3}$ of 12 is $\qquad$
$\frac{1}{2}$ of 8 is
$\qquad$
c) $\frac{1}{2}$ of 6
d) $\frac{1}{4}$ of 12 $\frac{1}{2}$ of 6 is $\qquad$ $\frac{1}{4}$ of 12 is $\qquad$
4. Kevin finds $\frac{1}{2}$ of 6 by dividing: 6 divided into 2 groups gives 3 in each group $(6 \div 2=3)$.

Write a division statement to find the amount.
a) $\frac{1}{2}$ of 8
b) $\frac{1}{2}$ of 10
c) $\frac{1}{2}$ of 16
d) $\frac{1}{2}$ of 20
$\qquad$
$8 \div 2=4$
e) $\frac{1}{2}$ of 6
f) $\frac{1}{2}$ of 14
g) $\frac{1}{2}$ of 18
h) $\frac{1}{2}$ of 4
5. Circle $\frac{1}{2}$ of each set of lines.

HINT: Count the lines and divide by 2.
a) $1|1| 1 \mid$
$1|1| 1 \mid$
c) 1111
d) $||1|||\mid 1$
b)

)
e) $|1| 1||||||\mid 1$
6. Fill in the missing number to make a fraction that is equal to $\frac{1}{2}$.
a)

b)

c)

d)

e)

f)

12
g)

h)

i)

j)

7. Complete each statement by writing "more than half", "half" or "less than half". HINT: Start by finding half of the number by skip counting by 2 s .
a) 4 is $\qquad$ of 6
b) 4 is $\qquad$ of 8
c) 7 is $\qquad$ of 12
d) 3 is $\qquad$ of 10

