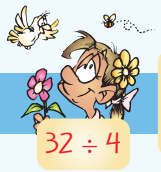
NA 34

Division mental strategies



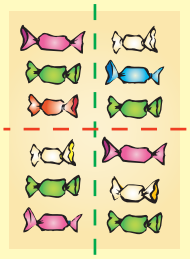
"Share 32 among 4"
or
"How many 4s in 32?"

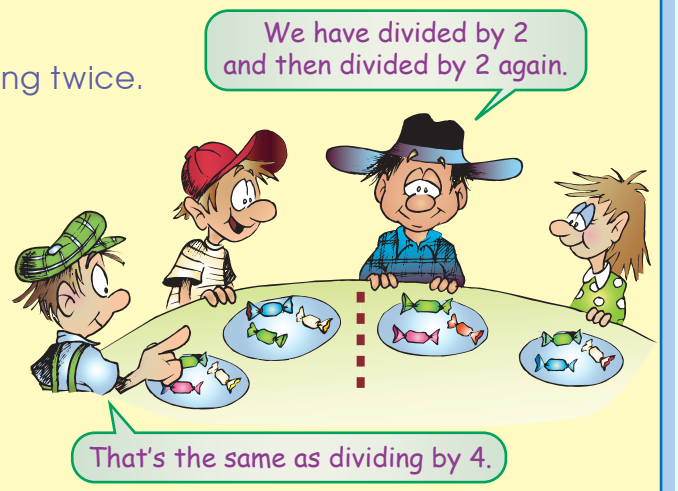
Maths Builder Online Reference: **Multiplication and Division 4:NA34**

When we divide by 2, we are halving.
We can work out **division by 4,** by halving twice.

$12 \div 4$ is the same as
$\frac{1}{2}$ of 12, then $\frac{1}{2}$ of the answer.

$\frac{1}{2}$ of 12 = 6, $\frac{1}{2}$ of 6 = 3
(12 ÷ 2 = 6, 6 ÷ 2 = 3)
so 12 ÷ 4 = 3



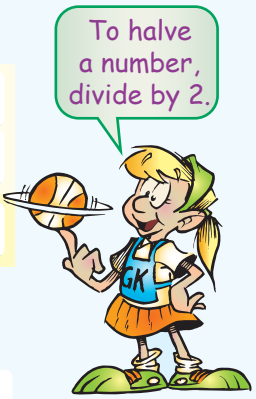


1 Divide by 4 by halving and halving again.

a
$\frac{1}{2}$ of 16 = ☐
$\frac{1}{2}$ of 8 = ☐
so 16 ÷ 4 = ☐

b
20 ÷ 2 = ☐
10 ÷ 2 = ☐
so 20 ÷ 4 = ☐

c
28 ÷ 2 = ☐
☐ ÷ 2 = ☐
so 28 ÷ 4 = ☐

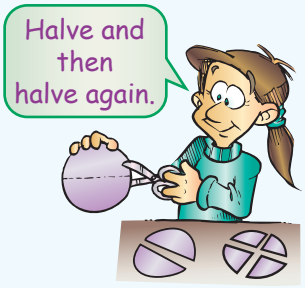


2 Can you do these in your head?

a 48 ÷ 4 = ☐
b 36 ÷ 4 = ☐
c 80 ÷ 4 = ☐
d 52 ÷ 4 = ☐
e 100 ÷ 4 = ☐
f 72 ÷ 4 = ☐

3

a ☐ 4) 12
b ☐ 4) 60
c ☐ 4) 400
d ☐ 4) 120
e ☐ 4) 200
f ☐ 4) 84
g ☐ 4) 800
h ☐ 4) 64



4 How could we divide by 8 and by 16 using only halving?

÷ 8
÷ 16

Try these.
a 64 ÷ 8 ☐
b 64 ÷ 16 ☐
c 120 ÷ 8 ☐
d 400 ÷ 16 ☐

ACMNA076 (Y4 Number and place value/S2 Multiplication and division 2)
See also Maths Builder **Multiplication and Division 4:NA34C** Division, **MD 4:NA34S** Division.

©Alan McSeveny