

Hampshire Mathematics Team

Multiplication templates

One, ten, five derive...

6 x table

Multiplication and Division Facts

One, ten, five derive...

6

$6+6=$

$6+6+6=$

$6+6+6+6=$

$6+6+6+6+6=$

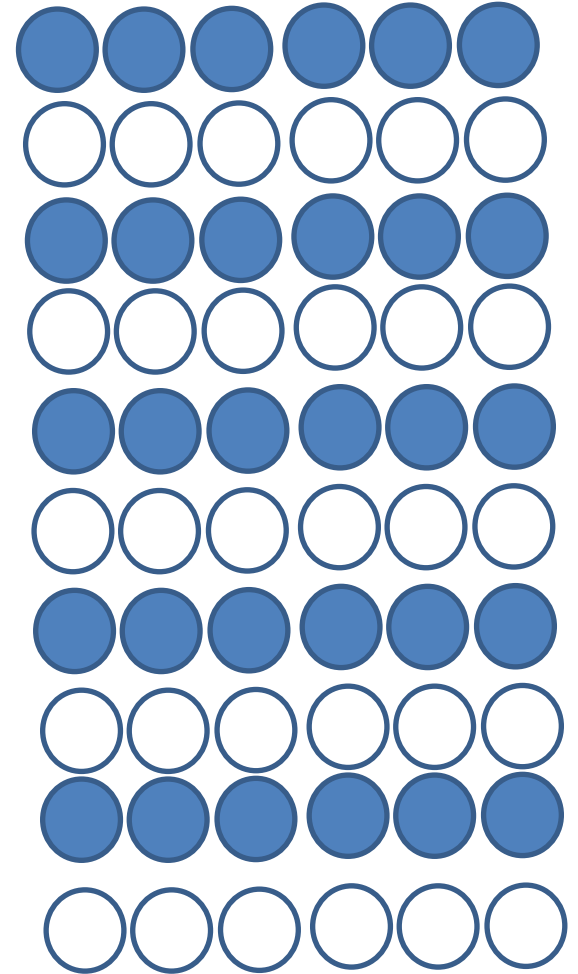
$6+6+6+6+6+6=$

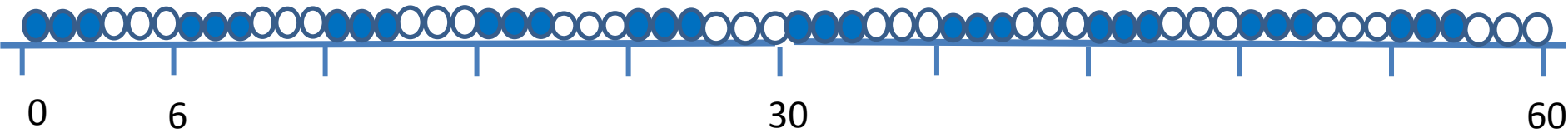
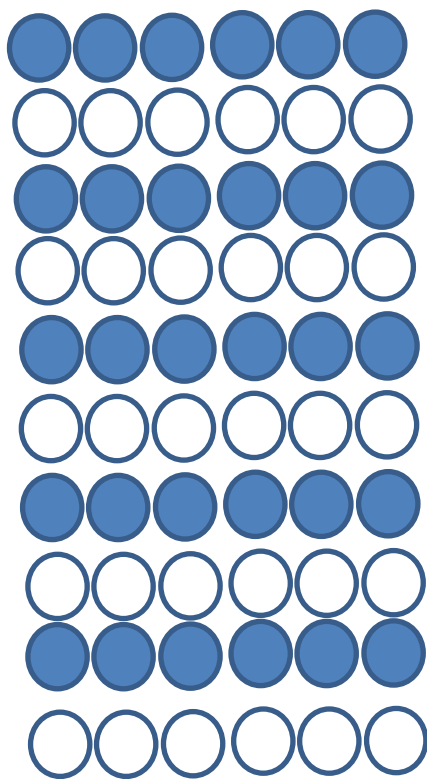
$6+6+6+6+6+6+6=$

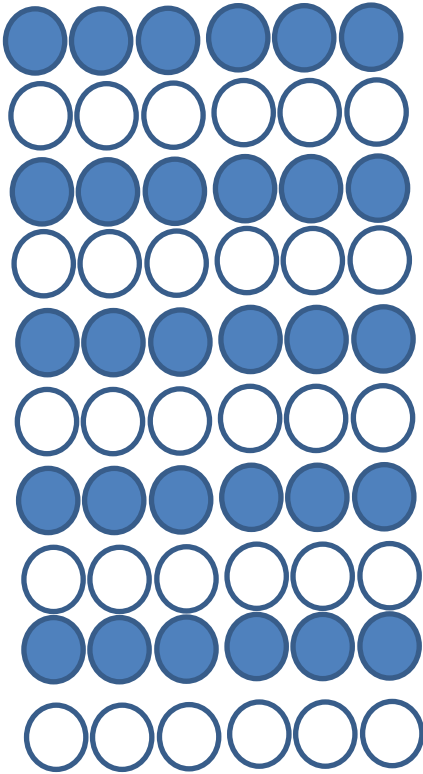
$6+6+6+6+6+6+6+6=$

$6+6+6+6+6+6+6+6+6=$

$6+6+6+6+6+6+6+6+6+6=$







$6 \times 1 =$

$6 \times 2 =$

$6 \times 3 =$

$6 \times 4 =$

$6 \times 5 =$

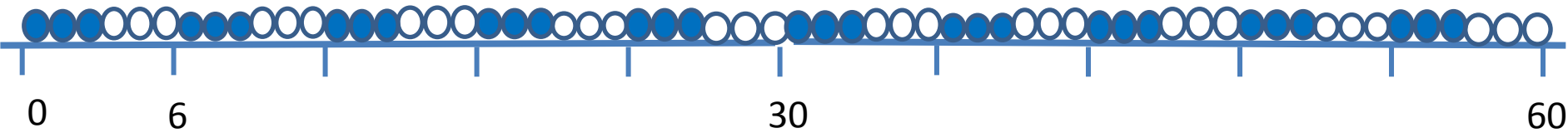
$6 \times 6 =$

$6 \times 7 =$

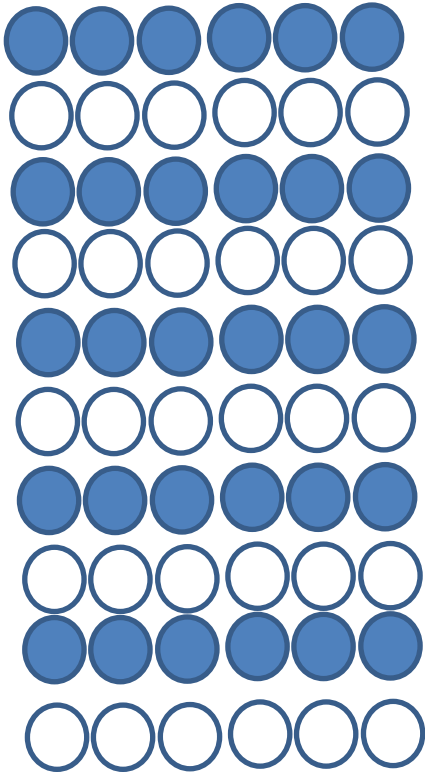
$6 \times 8 =$

$6 \times 9 =$

$6 \times 10 =$



Counting in 6s, Multiples of 6



6

$6+6=$

$6+6+6=$

$6+6+6+6=$

$6+6+6+6+6=$

$6+6+6+6+6+6=$

$6+6+6+6+6+6+6=$

$6+6+6+6+6+6+6+6=$

$6+6+6+6+6+6+6+6+6=$

$6+6+6+6+6+6+6+6+6+6=$

$6 \times 1=$

$6 \times 2=$

$6 \times 3=$

$6 \times 4=$

$6 \times 5=$

$6 \times 6=$

$6 \times 7=$

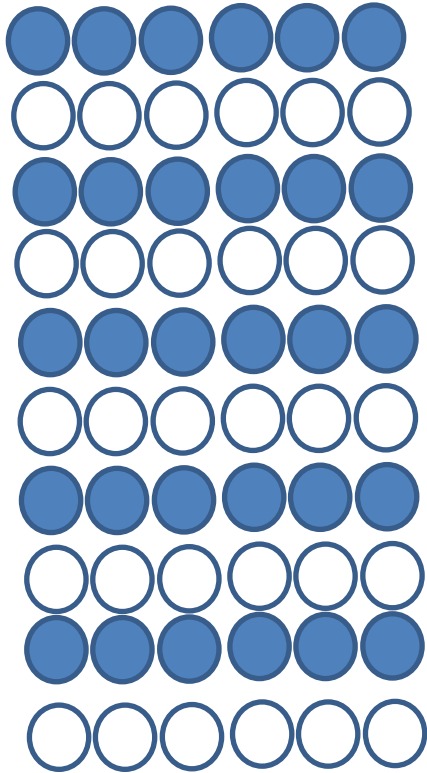
$6 \times 8=$

$6 \times 9=$

$6 \times 10=$



Multiples of 6

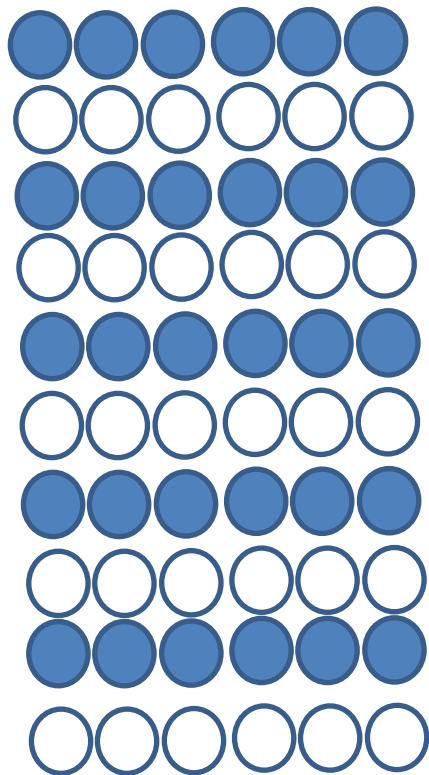


- 6 X1=
- 6 X2=
- 6 X3=
- 6 X4=
- 6 X5=
- 6 X6=
- 6 X7=
- 6 X8=
- 6 X9=
- 6 X10=

What is your favourite order for working out these linked facts?



How many groups of 6 in multiples of 6...?



6

12

18

24

30

36

42

48

54

60

$6 \div 6 =$

$12 \div 6 =$

$18 \div 6 =$

$24 \div 6 =$

$30 \div 6 =$

$36 \div 6 =$

$42 \div 6 =$

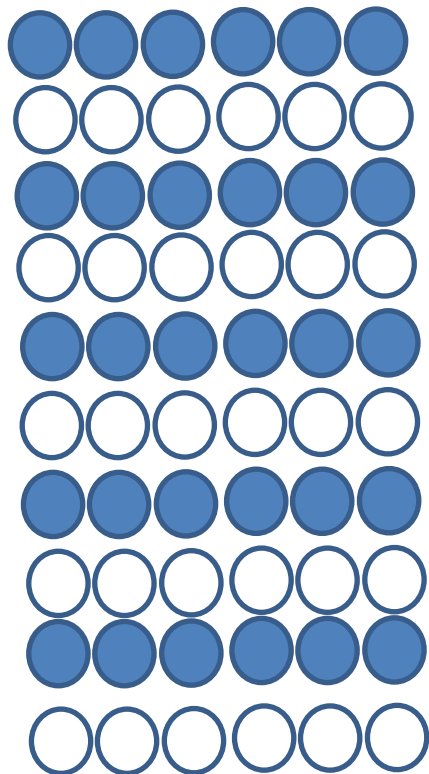
$48 \div 6 =$

$54 \div 6 =$

$60 \div 6 =$



How many groups of 6 in any number...?



7

15

19

29

39

44

48

51

57

61

$7 \div 6 =$

$15 \div 6 =$

$19 \div 6 =$

$29 \div 6 =$

$39 \div 6 =$

$44 \div 6 =$

$48 \div 6 =$

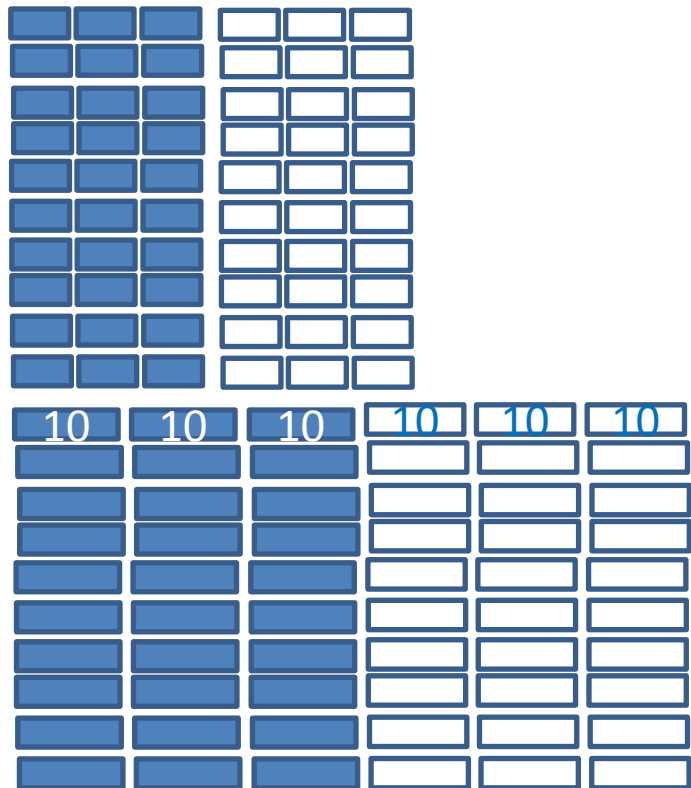
$51 \div 6 =$

$57 \div 6 =$

$61 \div 6 =$



Multiples of 6, 60



$6 \times 1 =$

$60 \times 1 =$

$6 \times 2 =$

$60 \times 2 =$

$6 \times 3 =$

$60 \times 3 =$

$6 \times 4 =$

$60 \times 4 =$

$6 \times 5 =$

$60 \times 5 =$

$6 \times 6 =$

$60 \times 6 =$

$6 \times 7 =$

$60 \times 7 =$

$6 \times 8 =$

$60 \times 8 =$

$6 \times 9 =$

$60 \times 9 =$

$6 \times 10 =$

$60 \times 10 =$



Dividing into groups of 6, 60



$30 \div 6 =$

$6 \div 6 =$

$18 \div 6 =$

$24 \div 6 =$

$42 \div 6 =$

$60 \div 6 =$

$12 \div 6 =$

$36 \div 6 =$

$48 \div 6 =$

$54 \div 6 =$



$300 \div 60 =$

$60 \div 60 =$

$180 \div 60 =$

$240 \div 60 =$

$420 \div 60 =$

$600 \div 60 =$

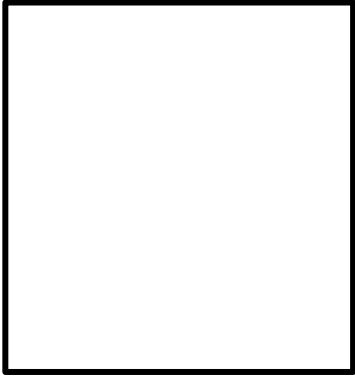
$600 \div 60 =$

$360 \div 60 =$

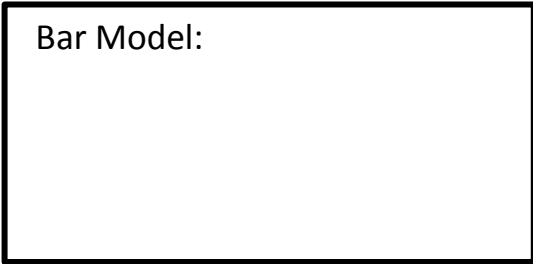
$480 \div 60 =$

$540 \div 60 =$

Array



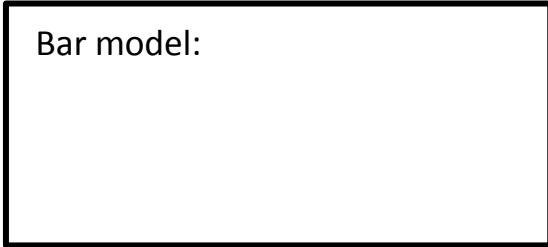
Bar Model:



Number line:



Bar model:

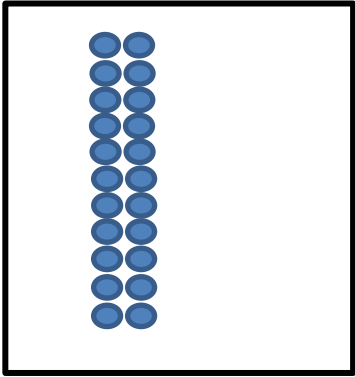


Number line:



$$6 \times 8 =$$

Array



$$200 \times 8 = 1600$$

$$800 \times 2 = 1600$$

$$0.2 \times 8 = 1.6$$

$$0.8 \times 2 = 1.6$$

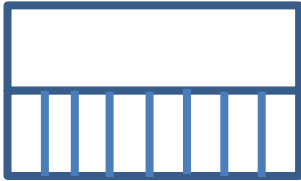
$$\frac{2}{10} \times 8 = \frac{16}{10} = 1 \frac{6}{10}$$

$$\frac{8}{10} \times 2 = \frac{16}{10} = 1 \frac{6}{10}$$

$$20 \times 8 = 160$$

$$80 \times 2 = 160$$

Bar Model:



$$8 \times 2 = 16$$

$$\text{Eg } 2 \times 8 = 16$$

$$16 \div 2 = 8$$

$$16 \div 8 = 2$$

Number line:



$$160 \div 2 = 80$$

$$160 \div 8 = 20$$

$$160 \div 20 = 8$$

$$160 \div 80 = 2$$

Bar model:

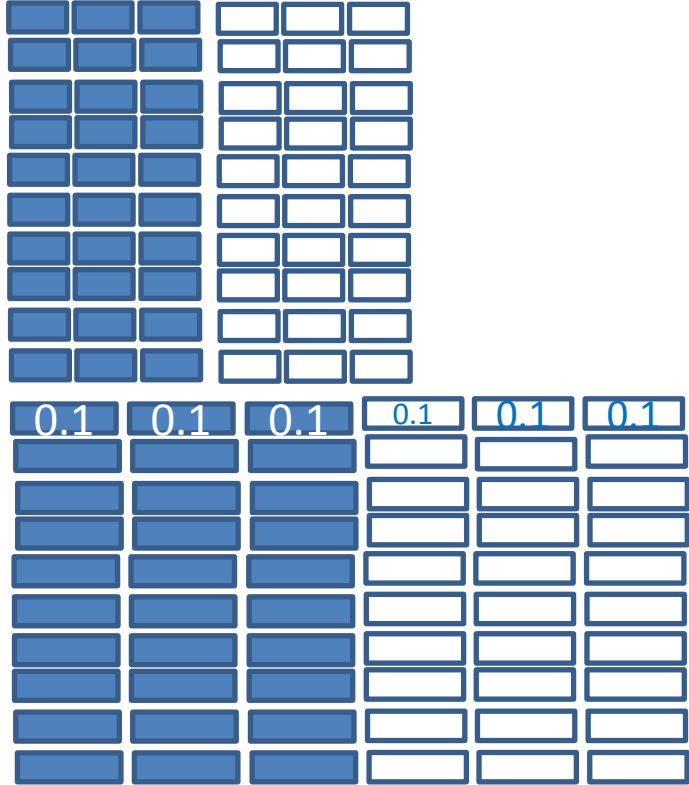


Number line:



Which sets of related facts would be appropriate for Y3, Y4, Y5?
 Could pupils adjust the number lines, bar models to match?
 Links to fractions?

Multiples of 6, 0.6



6 X1=

0.6 x1=

6 X2=

0.6 x2=

6 X3=

0.6 x3=

6 X4=

0.6 x4=

6 X5=

0.6 x5=

6 X6=

0.6 x6=

6 X7=

0.6 X7=

6 X8=

0.6 X8=

6 X9=

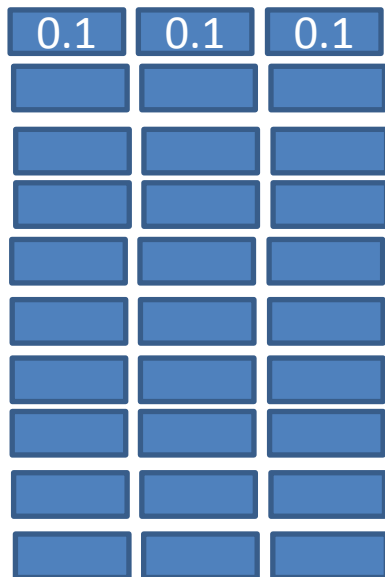
0.6 X9=

6 X10=

0.6 X10=



Multiples of $6/10$, 0.6



$6/10 \times 1 =$

$0.6 \times 1 =$

$6/10 \times 2 =$

$0.6 \times 2 =$

$6/10 \times 3 =$

$0.6 \times 3 =$

$6/10 \times 4 =$

$0.6 \times 4 =$

$6/10 \times 5 =$

$0.6 \times 5 =$

$6/10 \times 6 = 36/10 = 3 \frac{6}{10}$

$0.6 \times 6 =$

$6/10 \times 7 =$

$0.6 \times 7 =$

$6/10 \times 8 =$

$0.6 \times 8 =$

$6/10 \times 9 =$

$0.6 \times 9 =$

$6/10 \times 10 =$

$0.6 \times 10 =$



Dividing into groups of 0.6, 6



$$3 \div 0.6 =$$
$$6 \div 0.6 =$$

$$0.6 \div 0.6 =$$
$$1.2 \div 0.6 =$$

$$1.8 \div 0.6 =$$
$$3.6 \div 0.6 =$$

$$2.4 \div 0.6 =$$
$$4.8 \div 0.6 =$$

$$4.2 \div 0.6 =$$
$$5.4 \div 0.6 =$$



$$30 \div 6 =$$
$$60 \div 6 =$$

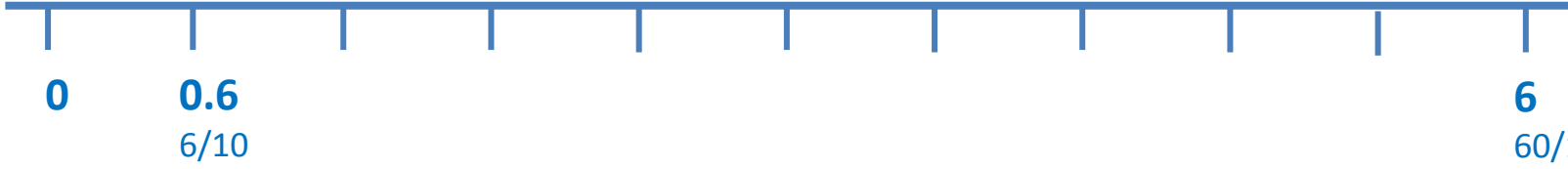
$$6 \div 6 =$$
$$12 \div 6 =$$

$$18 \div 6 =$$
$$36 \div 6 =$$

$$24 \div 6 =$$
$$48 \div 6 =$$

$$42 \div 6 =$$
$$54 \div 6 =$$

Dividing into groups of 0.6, 6, 60,



$3 \div 0.6 =$
 $6 \div 0.6 =$

$0.6 \div 0.6 =$
 $1.2 \div 0.6 =$

$1.8 \div 0.6 =$
 $3.6 \div 0.6 =$

$2.4 \div 0.6 =$
 $4.8 \div 0.6 =$

$4.2 \div 0.6 =$
 $5.4 \div 0.6 =$



$30 \div 6 =$
 $60 \div 6 =$

$6 \div 6 =$
 $12 \div 6 =$

$18 \div 6 =$
 $36 \div 6 =$

$24 \div 6 =$
 $48 \div 6 =$

$42 \div 6 =$
 $54 \div 6 =$



$300 \div 60 =$
 $600 \div 60 =$

$60 \div 60 =$
 $600 \div 60 =$

$180 \div 60 =$
 $360 \div 60 =$

$240 \div 60 =$
 $480 \div 60 =$

$420 \div 60 =$
 $540 \div 60 =$