## 1

Continue drawing the number strips for 18. Write down the additions.

|        | 10 |   |        | 8 |
|--------|----|---|--------|---|

10 + 8  =  18
9 + 1 + 8  =  9 + 9   =  18
8 + 2 + 8  =  8 + 10  =  18

## 2

Fill in the missing numbers and signs.

a)

$6 \xrightarrow{+6} \boxed{\phantom{x}} \xrightarrow{+6} \boxed{\phantom{x}}$

b)

$\boxed{\phantom{x}} \xrightarrow{+4} 18 \xrightarrow[+9]{} \boxed{\phantom{x}}$

## 3

Fill in the missing numbers.

a)

b)

9 + 9 = ☐☐        18 – 9 = ☐        20 – 2 = ☐☐        18 + 2 = ☐☐

9 + ☐ = 18        18 – ☐ = 9        20 – ☐ = 18        18 + ☐ = 20

## 4

Sandra had 18 p. She bought sweets for 9 p and chewing gum for 3 p.

How much money ($x$) does she have left?        $x = \boxed{\phantom{x}}$ p

**Underline** the equation which describes the story.

$18 - 9 - 3 = x$     $18 - 9 + 3 = x$     $18 + 9 - 3 = x$

## 5

Write down what you think the answers might be.

a)  X + V + III  =        b)  XII + VI  =        c)  XIV + IV  =

d)  XV + I  =        e)  XV + II  =        f)  XVII + I  =

**1**

The animals start at 0 and jump the same each time. Draw the jumps.

jumps 2  0  2                18        jumps 6  0                18

jumps 3  0    3             18        jumps 7  0                18

jumps 4  0    4             18        jumps 9  0                18
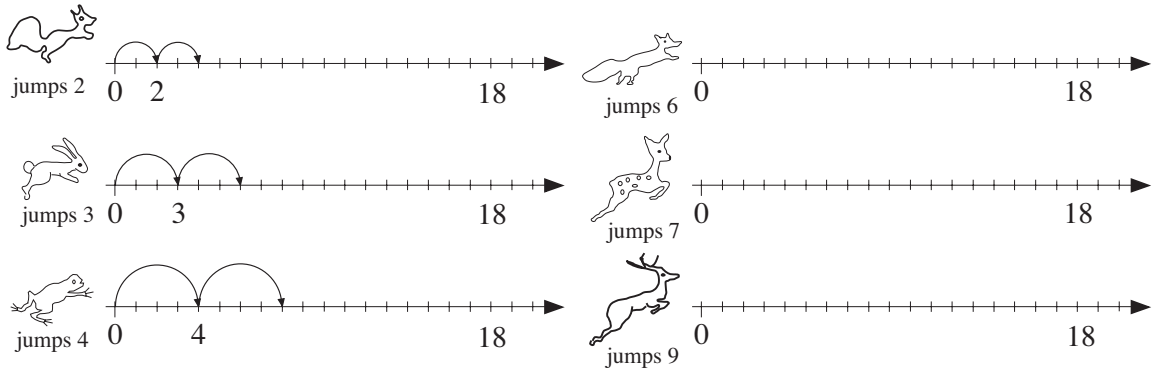
Tick the animals which land on 18.

**2**

Fill in the missing numbers.

$9 + 9 =$ ☐☐        $20 -$ ☐ $= 18$        $9 -$ ☐ $= 1$        $10 +$ ☐ $= 18$

$18 -$ ☐ $= 9$        $18 - 8 =$ ☐☐        $18 - 6 =$ ☐☐        $18 -$ ☐ $= 15$

**3**

Which numbers can be written instead of the letters so that the statements are correct? Join each solution to the matching number line.
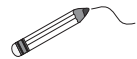
$b + b = 18$        $b =$ ☐

$17 < a < 19$        $a:$ ☐

$9 \leq s < 10$        $s:$ ☐

$11 < u + 3 < 13$        $u:$ ☐

$20 - k = 11$        $k =$ ☐

0        10        20

0        10        20
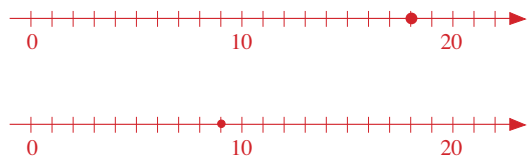
**4**

There are 18 tins of fruit on the shelf:

    5 tins of cherries
    4 tins of plums
    3 tins of pears.

The rest are tins of peaches.

How many tins of peaches are on the shelf?
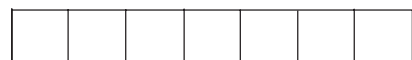
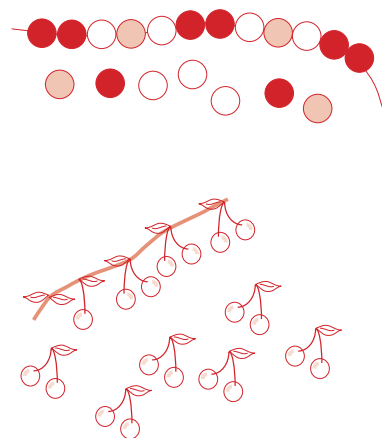**1** Continue drawing the number strips for 19. Write down the additions.

| 10 | |
|---|---|

| | 9 | |
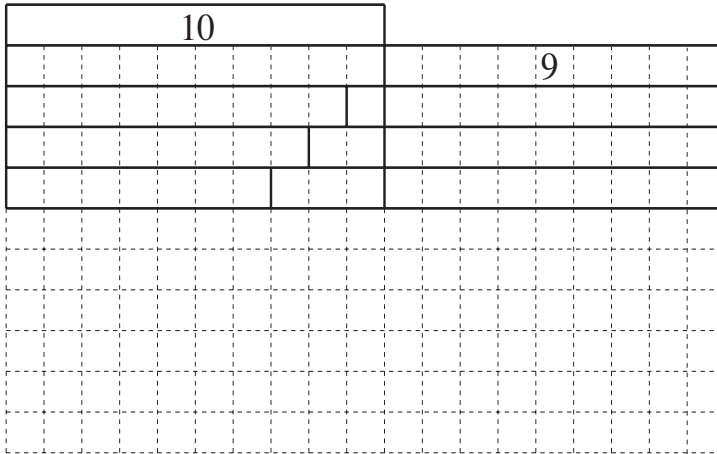
$$10 + 9 = 19$$
$$9 + 1 + 9 = 9 + 10 = 19$$
$$8 + 2 + 9 = 8 + 11 = 19$$

**2** Join the equations to the correct pictures. Fill in the missing numbers.

$4 + 7 + 8 = \boxed{\phantom{00}}$

$19 - 4 - 7 = \boxed{\phantom{0}}$

$19 - 7 = \boxed{\phantom{00}}$

$7 + 12 = \boxed{\phantom{00}}$

$\boxed{\phantom{0}} + 7 = 19 - 4$

$7 + \boxed{\phantom{0}} + 4 = 19$

$\boxed{\phantom{00}} - 7 = 4 + 8$

$19 - 12 = \boxed{\phantom{0}}$

$\boxed{\phantom{00}} - 4 - 8 = 7$

$12 + 7 = \boxed{\phantom{00}}$

$19 - \boxed{\phantom{0}} = 12$

$19 - \boxed{\phantom{00}} = 7$

**3** Betty had 19 p. She bought 2 bunches of snowdrops.
How much money has she left? Complete the table.

| cost of 1 bunch | 5 | 7 | | | 9 | |
|---|---|---|---|---|---|---|
| cost of 2 bunches | 10 | | 8 | 12 | | |
| money left | | | | | 3 | 13 |

**4** Fill in the missing numbers.

$9 + 10 = \boxed{\phantom{00}}$    $\boxed{\phantom{00}} = 10$    $9 + 9 = \boxed{\phantom{00}}$    $\boxed{\phantom{00}} - 1 = 19$

$9 + \boxed{\phantom{0}} = 18$    $19 - \boxed{\phantom{00}} = 9$    $10 + \boxed{\phantom{0}} = 19$    $\boxed{\phantom{00}} - 11 = 9$
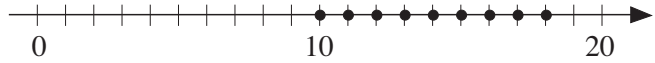
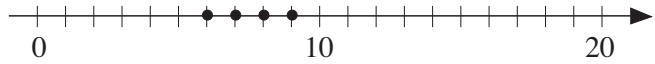**1** Join up each label to the matching number line.
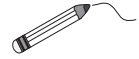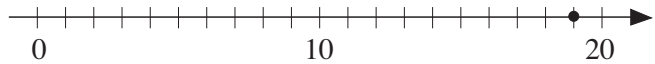
| 1-digit numbers greater than 5 |

| Even numbers greater than 5 |

| 2-digit numbers smaller than 19 |

| Odd numbers not smaller than 19 |
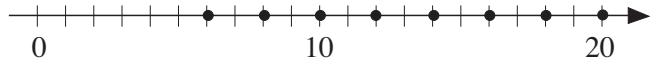


**2** Fill in the missing numbers.

$5 + 6 =$ ☐☐     $9 +$ ☐ $= 16$     $6 +$ ☐ $= 12$     $6 + 7 =$ ☐☐

☐ $+ 9 = 18$     $8 + 6 =$ ☐☐     $7 +$ ☐ $= 15$     $19 -$ ☐ $= 12$

☐☐ $- 1 = 19$     $9 + 10 =$ ☐☐     ☐☐ $- 7 = 6$     ☐☐ $- 1 = 18$

**3** Which numbers can be written instead of the letters so that the inequalities are correct?  Join each solution to the matching number line.
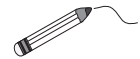
$16 < n < 20$     $n$: ☐

$18 > a - 2 > 14$     $a$: ☐

$13 < b < 18$     $b$: ☐

$14 \leq s \leq 17$     $s$: ☐

$15 \leq u + 1 \leq 18$     $u$: ☐
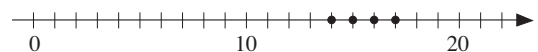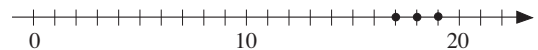


**4** Fill in the missing numbers and signs.

**1** Complete the table and write down the rule in different ways.

$a + b =$ ▢▢    ▢▢▢▢▢▢    ▢▢▢▢▢▢

| $a$ | 1 | 5 | 14 | | 2 | 9 | 11 | | 13 | | 8 | 10 | | | 7 | | 17 | | 19 | | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $b$ | 19 | | | 5 | | | | 8 | | 17 | | | 4 | 16 | | 14 | | 2 | | 0 | |

**2** Write down how much money is in each purse.
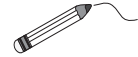
Join up the purses which together add up to 20 p.



**3** Fill in the missing numbers.

$10 + 10 =$ ▢▢         $20 - 10 =$ ▢▢         $20 - 5 =$ ▢▢

$15 + 5 =$ ▢▢         $10 +$ ▢▢ $= 20$         $20 -$ ▢▢ $= 10$

$20 - 15 =$ ▢         $5 + 15 =$ ▢▢         ▢▢ $+ 10 = 20$

▢ $- 10 = 10$         $20 -$ ▢ $= 15$         $15 +$ ▢ $= 20$

**4** Write down what you think the answers might be.

a)   $X + V =$            b)   $XV + V =$            c)   $XVI + I =$

c)   $XVIII + I =$         d)   $XIX + I =$            e)   $XX - X =$

**5** Complete the table if △ + △ = ▢

| △ | 0 | 1 | 2 | | | 5 | 6 | | 8 | 9 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ▢ | 0 | 2 | | 6 | 8 | | | 14 | | | 20 |

**1** Write the correct numbers in the number strips and boxes.



$20$   is twice / is half of   ☐ ☐     $10$   is twice / is half of   ☐

$4$   is twice / is half of   ☐     ☐   is twice / is half of   $1$

**2** Fill in the missing numbers.

$1 + 1 = $ ☐     $5 + $ ☐ $ = 10$     $20 - 2 = $ ☐☐     $20 - 4 = $ ☐☐

$10 + $ ☐☐ $ = 20$     $15 + 5 = $ ☐☐     $2 + 8 = $ ☐☐     $12 + 8 = $ ☐☐

$10 - 1 = $ ☐     $20 - 5 = $ ☐☐     ☐☐ $ - 18 = 2$     ☐☐ $ - 16 = 4$

$20 - $ ☐ $ = 19$     ☐☐ $ - 5 = 10$     $20 - 8 = $ ☐☐     $20 - $ ☐ $ = 12$

**3** Divide 20 into 3 numbers.    $a + b + c = 20$    Complete the table.

| a | 9 | 3 | | 8 | 2 | | 7 | 8 | 9 | 11 | 9 | | 2 | | 7 |
|---|---|---|---|---|---|---|---|---|---|----|---|---|---|---|---|
| b | 1 | 2 | 3 | 6 | 6 | 2 | | 3 | 9 | 4 | 4 | 8 | 7 | 5 | 7 |
| c | 10 | | 5 | | | 14 | 5 | | | | | 8 | | 6 | |

**4** There were some biscuits on a plate

Four children ate 3 biscuits each and there were 8 biscuits left.

How many biscuits were on the plate to begin with?
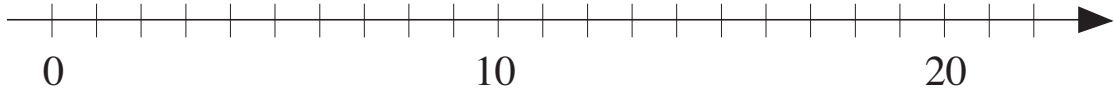
**1** Colour in the points on the number line as shown

        1-digit, even: *red*          1-digit, odd: *blue*

        2-digits, even: *yellow*        2-digits, odd: *green*



**2** Fill in the missing numbers and signs.

a) $20 \xrightarrow{-8} \square\square \xrightarrow{-6} \square\square$

b) $\square\square \xrightarrow{+5} 15 \xrightarrow{+5} \square\square$

c) $20 \xrightarrow{-9} \square\square \xrightarrow{-7} \square\square$

d) $\square\square \xrightarrow{+4} 18 \xrightarrow{-7} \square\square$

**3** Which numbers can be written instead of the letters so that the inequalities are correct? Join each solution to the matching number line.
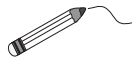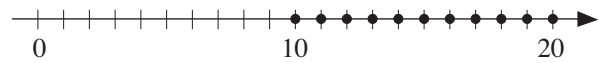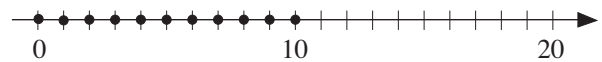
$20 - s > 9$     $s:$ [ ]

$20 - a < 11$    $a:$ [ ]

$r + r \leq 20$     $r:$ [ ]

$z + 9 < 20$    $z:$ [ ]

$k - 9 > 0$     $k:$ [ ]



**4** Find the shapes in the grid. Fill in the missing numbers which sum to 20.

| 3 | 8 | 5 | 9 | 2 | 8 | 4 | 3 | 0 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| 7 | 4 | 1 | 7 | 1 | 8 | 6 | 9 | 7 | 9 |
| 7 | 3 | 8 | 7 | 9 | 1 | 6 | 9 | 3 | 2 |
| 3 | 0 | 7 | 9 | 3 | 8 | 7 | 1 | 8 | 8 |
| 8 | 7 | 3 | 6 | 3 | 7 | 0 | 9 | 5 | 8 |
| 8 | 6 | 7 | 5 | 9 | 2 | 7 | 7 | 6 | 5 |

$= 20$

**1** The numbers always **increase** or **decrease** by the same amount.

Fill in the missing numbers.

$8 \xrightarrow{+\ \square} 10 \xrightarrow{+\ \square} 12 \xrightarrow{+\ \square} \square\square \xrightarrow{+\ \square} \square\square \xrightarrow{+\ \square} \square\square$

$18 \xrightarrow{-\ \square} 15 \xrightarrow{-\ \square} \square\square \xrightarrow{-\ \square} \square \xrightarrow{-\ \square} \square \xrightarrow{-\ \square} \square$

$\square \xrightarrow{+\ \square} \square \xrightarrow{+\ \square} 8 \xrightarrow{+\ \square} 12 \xrightarrow{+\ \square} \square\square \xrightarrow{+\ \square} \square\square$

**2** Fill in the missing numbers.

$10 - 2 = \square$      $9 + 9 = \square\square$      $15 + \square = 20$      $7 + 8 = \square\square$

$18 + \square = 20$      $13 + \square = 20$      $15 - 5 = \square\square$      $9 + \square = 17$

$\square + 12 = 20$      $\square\square + 6 = 20$      $5 + \square\square = 15$      $12 + \square = 20$

$\square\square + 9 = 20$      $20 - \square = 12$      $20 - \square = 15$      $8 + \square = 16$

**3** Fill in the missing numbers.

a) $\underbrace{10 + 7}_{\square\square} <_3 \underbrace{10 + \square\square}_{\square\square}$

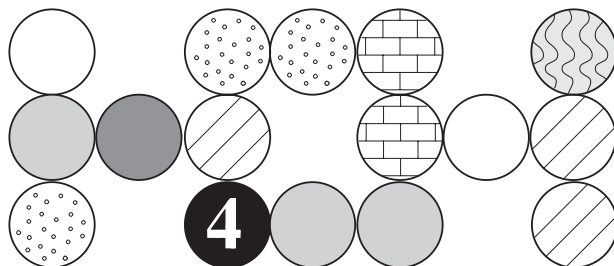b) $\underbrace{7 + \square\square}_{\square\square} <_2 \underbrace{9 + 11}_{\square\square}$

c) $\underbrace{20 - 8}_{\square\square} = \underbrace{20 - \square\square}_{\square\square}$

d) $\underbrace{\square\square - 8}_{\square\square} {}_4{>} \underbrace{16 - 8}_{\square\square}$

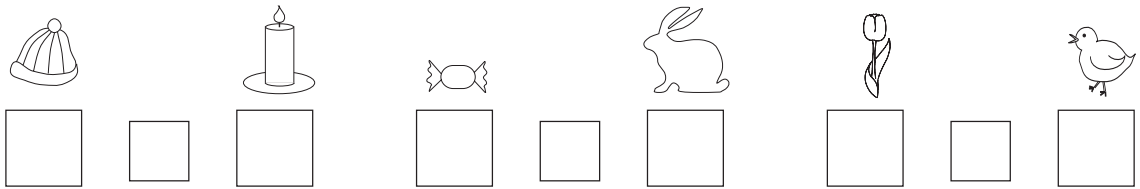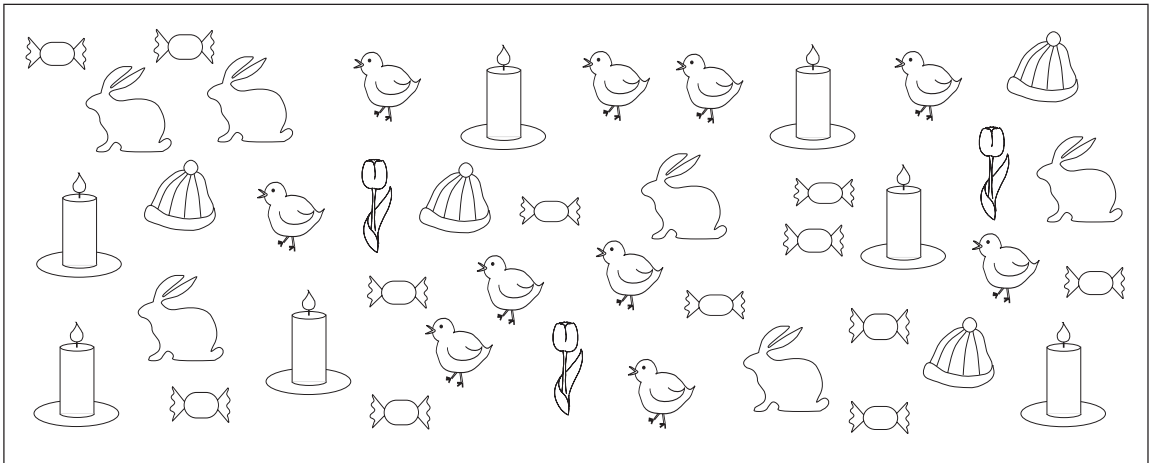**4** Show 20 as the sum of three 1-digit numbers.

**Do not use 0.**
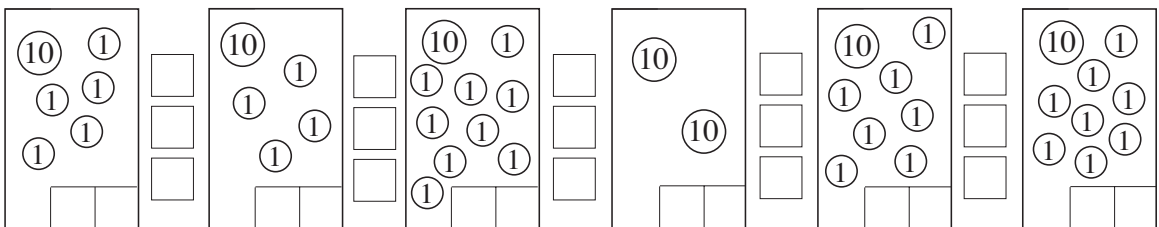
Write the numbers in each shape.

**1** Which are there more of in the picture?  How many more?

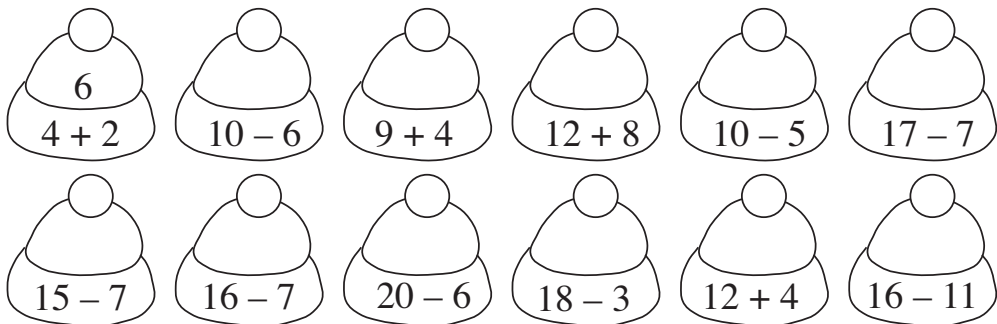**2** Write in the total amount in each picture.  Compare the picures.

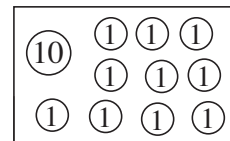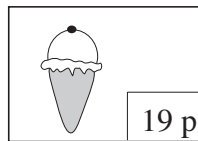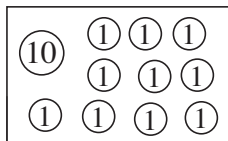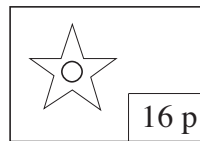Write in the missing signs. Choose from $<, >, =, \leq, \geq, \neq$

**3** Write in the answers.  Colour the parts of the hats as shown.

Even: R     Odd: B     1-digit: R     2-digit: Y

$6$
$4 + 2$     $10 - 6$     $9 + 4$     $12 + 8$     $10 - 5$     $17 - 7$
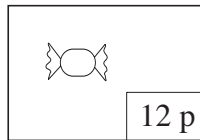
$15 - 7$     $16 - 7$     $20 - 6$     $18 - 3$     $12 + 4$     $16 - 11$

**1** Colour in as much money as you need to pay for the sweets.

| | | | |
|---|---|---|---|
| 🍦 20 p | 10 ① ① ① ① ① ① ① ① ① ① | 🍫 15 p | 10 ① ① ① ① ① ① ① ① ① ① |
| 🍬 12 p | 10 ① ① ① ① ① ① ① ① ① ① | 🥐 18 p | 10 ① ① ① ① ① ① ① ① ① ① |
| ☆ 16 p | 10 ① ① ① ① ① ① ① ① ① ① | 🍦 19 p | 10 ① ① ① ① ① ① ① ① ① ① |
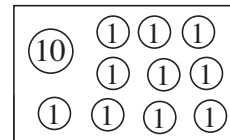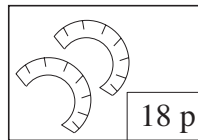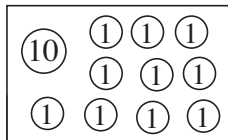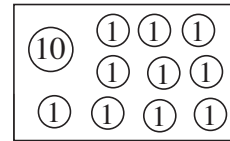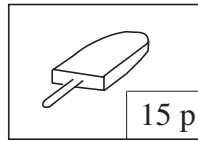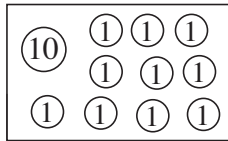
Colour in the sweets which could be paid for using only 2 p coins.

**2**
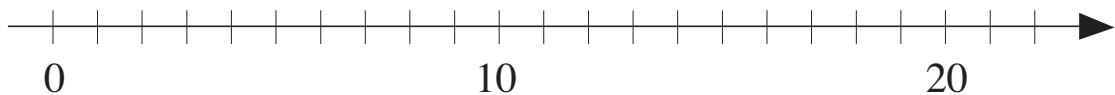
a) Colour red the shape which is 10th from the left.

b) Colour green the shape which is 3rd on the left of the red shape.

c) At which place from the left is the green shape?

d) Colour blue every 5th shape from the right.

**3** I am thinking of **two** numbers.

a) *1st number*: The next biggest number to it is 2 less than 20.

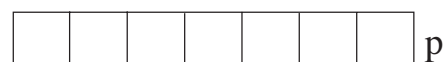b) *2nd number*: It is the same distance from 6 as it is from 14.

```
0          10          20
```

Mark the numbers I am thinking of on the number line.

**4** Paul spent 12 p.

⑤ ⑤ ⑤

He paid with three 5 p pieces.

How much change was he given?   p

## 1

Complete the table. Write down the rule in different ways.

| a | 6 | 16 | 6 | 1 |    | 11 | 4 | 14 |    |    | 14 | 14 |    |    |
|---|---|----|---|---|----|----|---|----|----|----|----|----|----|----|
| b | 2 | 2  | 12| 7 | 7  |    |   | 5  | 15 | 3  |    | 3  |    |    |
| c | 8 | 18 | 18|   | 18 | 18 | 9 |    | 19 | 7  | 17 |    |    |    |

## 2

In Flower Street, the even numbers are on the left-hand side and the odd numbers are on the right-hand side.

Jeremy lives at number 8 and Andrew lives at number 18.

How many houses are between them?

## 3

12 boys take part in a race.

Albert has made the entry-number for each of them.

How many digits did he have to write down?

## 4

Fill in the missing numbers.

$9 + 4 = \boxed{\phantom{00}}$  $\qquad$  $10 + 10 = \boxed{\phantom{00}}$  $\qquad$  $16 - 12 = \boxed{\phantom{0}}$

$\boxed{\phantom{0}} + 17 = 19$  $\qquad$  $15 - \boxed{\phantom{00}} = 2$  $\qquad$  $17 - \boxed{\phantom{00}} = 2$

$19 - 16 = \boxed{\phantom{0}}$  $\qquad$  $17 - 14 = \boxed{\phantom{0}}$  $\qquad$  $5 + 14 = \boxed{\phantom{00}}$

$14 - \boxed{\phantom{00}} = 0$  $\qquad$  $7 + \boxed{\phantom{0}} = 14$  $\qquad$  $8 + 5 = \boxed{\phantom{00}}$

## 5

Fill in the missing numbers.

$9 + 6 + 5 = \boxed{\phantom{00}}$  $\qquad$  $18 - 6 - 4 = \boxed{\phantom{0}}$  $\qquad$  $16 - 13 + 11 = \boxed{\phantom{00}}$

$4 + 6 + 10 = \boxed{\phantom{00}}$  $\qquad$  $10 - 0 - 5 = \boxed{\phantom{0}}$  $\qquad$  $17 - 9 + 12 = \boxed{\phantom{00}}$

$6 + 6 + 8 = \boxed{\phantom{00}}$  $\qquad$  $19 - 7 - 5 = \boxed{\phantom{0}}$  $\qquad$  $20 - 15 + 9 = \boxed{\phantom{00}}$

**1** Fill in the missing numbers.

0 + 10 = ☐☐     20 – 18 = ☐     2 + 18 = ☐☐     9 + 11 = ☐☐

1 + 9 = ☐☐     20 – 20 = ☐     17 – ☐☐ = 0     0 + 20 = ☐☐

2 + 10 = ☐☐     ☐☐ – 19 = 1     ☐☐ – 14 = 1     4 + ☐ = 12

**2** Fill in the missing numbers.

1 + ☐☐ = 15     20 – 16 = ☐     6 + 4 = ☐☐

6 + 14 = ☐☐     18 – ☐☐ = 5     16 – 15 = ☐

4 + ☐ = 11     ☐☐ – 10 = 10     ☐☐ – 16 = 2

**3** Do the additions. Draw them on the number line.

a)     7 + 5 = ☐☐

7 + 3 + ☐



0          10          20

b)     6 + 7 = ☐☐

6 + 3 + ☐



0          10          20

c)     7 + 5 = ☐☐

7 + 10 – 5



0          10          20

d)     6 + 7 = ☐☐

6 + 10 – ☐
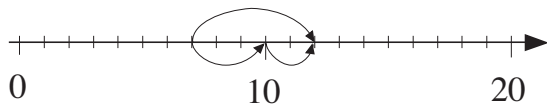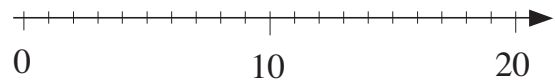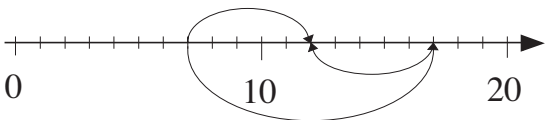


0          10          20
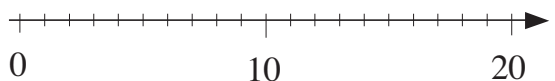
**4** What could the rule be?
Complete the table.
Write the rule in different ways.

| △ | 19 | 15 |   |    | 20 | 12 | 6 |   |
|---|----|----|---|----|----|----|---|---|
| ☐ | 13 | 9  | 8 | 14 |    |    |   | 2 |

☐ = ☐☐☐          △ = ☐☐☐

**1** Three different paths lead from the ant's nest to the grain of wheat.

Measure each line and write its length in the box beside it.

☐☐ cm        ☐☐ cm

☐☐ cm

☐☐ cm

☐☐ cm

☐☐ cm
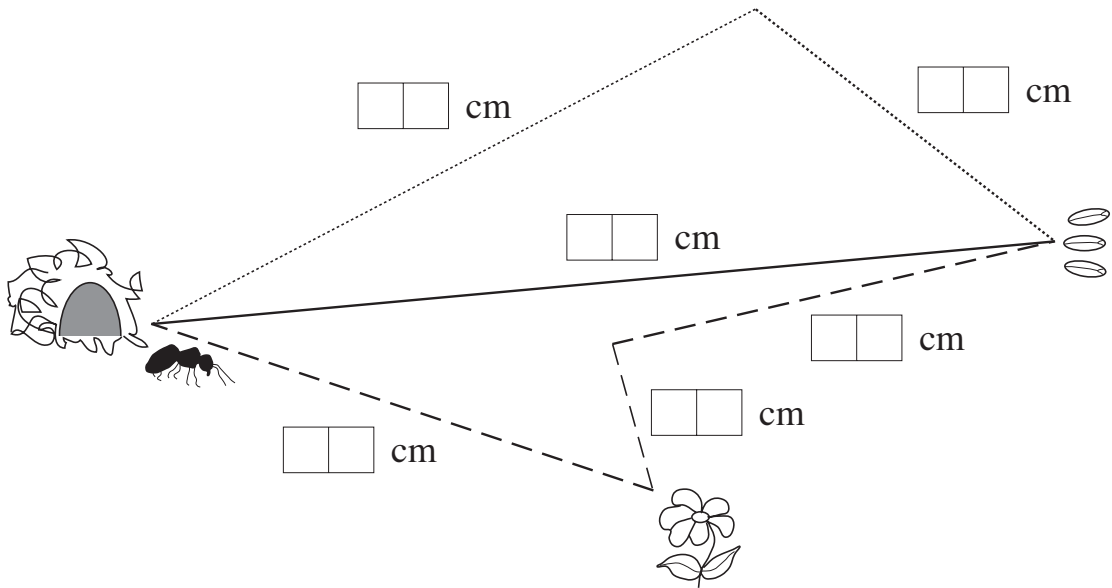
Length of the  . . . .   path:   ☐☐☐☐☐☐☐☐   cm

Length of the  _ _   path:   ☐☐☐☐☐☐☐☐   cm

Length of the  ___   path:   ☐☐☐☐☐☐☐☐   cm

Draw over the path which is shortest in green.

**2** We want to cut this 16 cm strip of paper into 2 cm strips.

Draw the cuts we will have to make.   How many cuts are there?   ☐

**3** Measure the length and width of the classroom in steps and metres.

a)    . . . . . . steps  <    **length** of classroom    <    . . . . . steps

         . . . . . .  m    <    **length** of classroom    <    . . . . . .  m

b)    . . . . . . steps  <    **width** of classroom    <    . . . . . . steps

         . . . . . .  m    <    **width** of classroom    <    . . . . . .  m

**1**

What can we use for measuring?

Join the objects to the correct measuring tool.
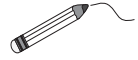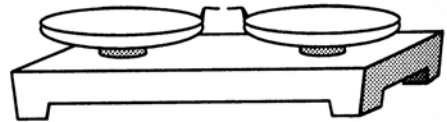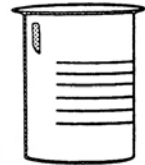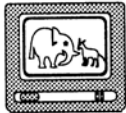
How heavy
is the cheese?

How much
water is in
the jug?

How long
is the desk?

How long is
the cartoon?

**2**

We put one brick on top of another.  How high is the tower if the bricks are:

a)    10 cm and 5 cm high                                               cm
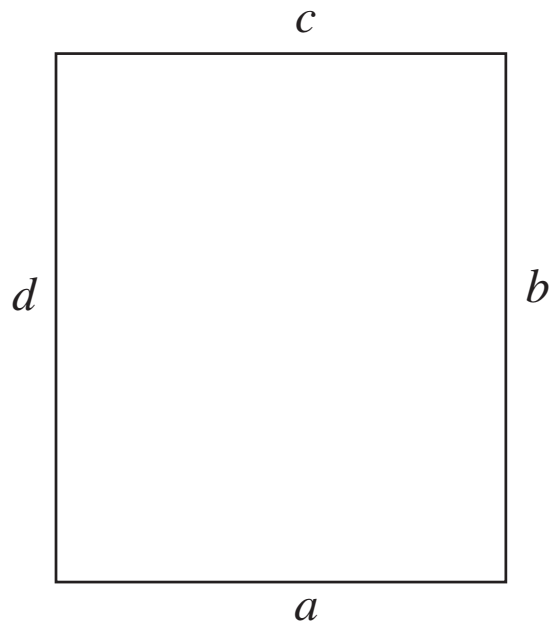
b)    6 cm and 7 cm high                                               cm

c)    12 cm and 8 cm high?                                             cm

**3**

Measure the sides of the **rectangle**.

*c*

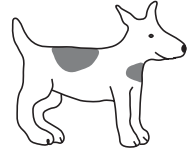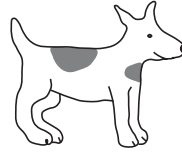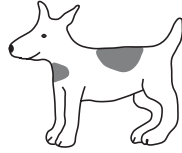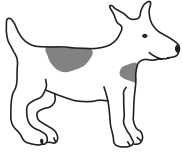*a* = [ ] cm          *b* = [ ] cm          *d*                                          *b*

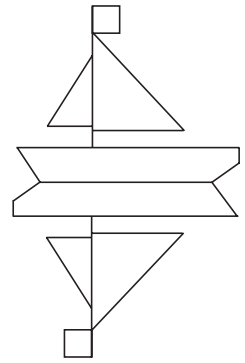*c* = [ ] cm          *d* = [ ] cm

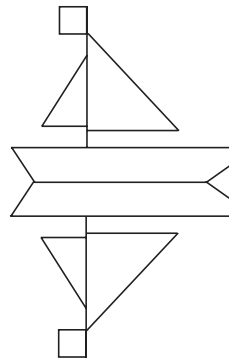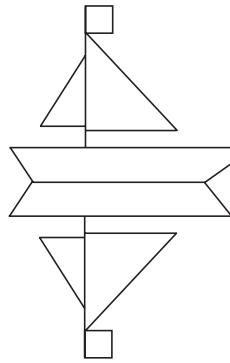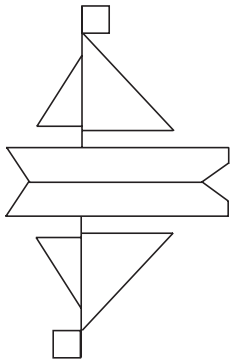The total length of the 4 sides is:

*a*

cm

**1** How would you see Bernard the dog in the mirror?
Colour the picture which is correct

**2** The boat is reflected in the water.   Colour in the drawing which is correct.
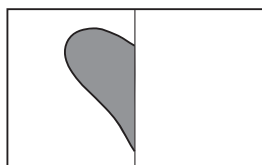
**3** Colour the gloves to make 2 pairs, one green and one red.

**4** What can we see if we unfold the paper?  Complete the drawings.

a)

b)

c)
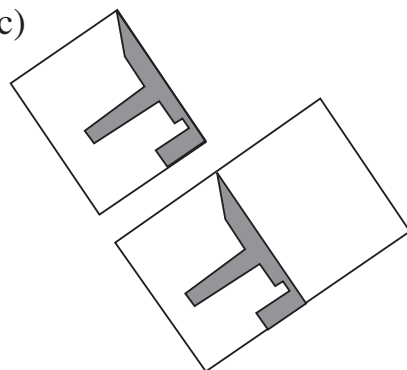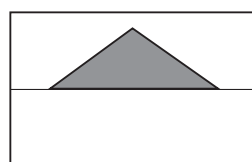
**1** Draw around the correct mirror image of the snowdrop in the water.
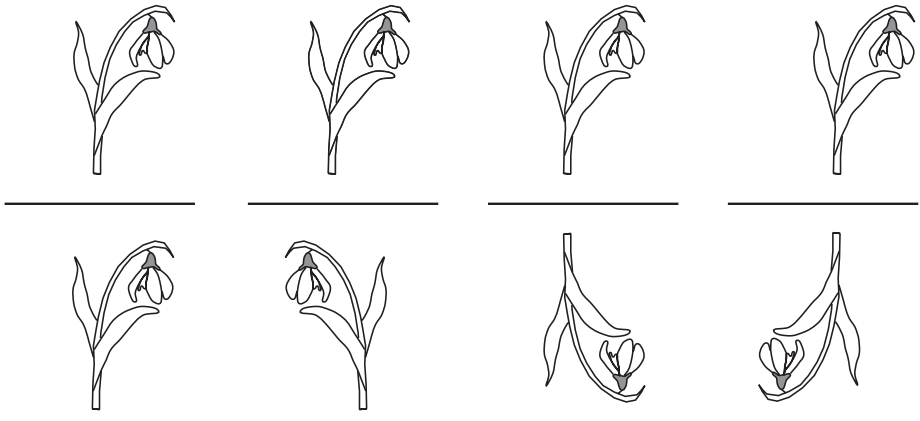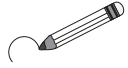
**2** Circle each picture which can be folded so that both halves are the same. Draw a line to show where you would fold them.
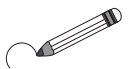
**3** We have drawn one half of some letters. Complete the drawings.
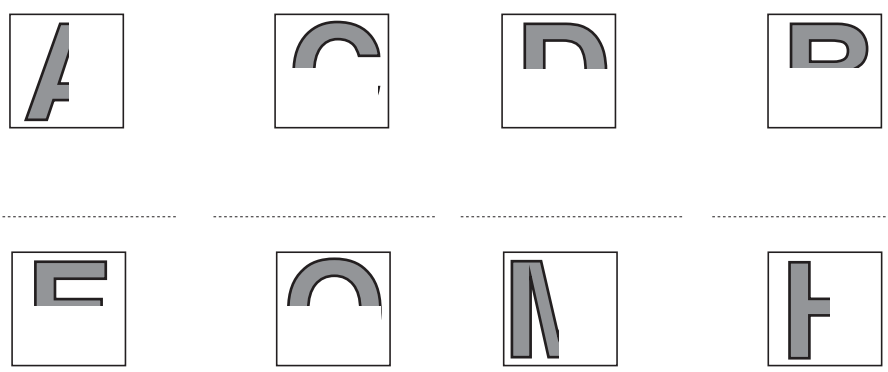
Write below each letter a word beginning with that letter.

**4** Find different ways to fold these shapes so that both halves are the same. Show the fold by drawing a line. Colour one half red and the other blue.

**1**  Write down the time shown by each clock.
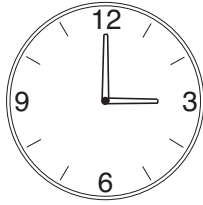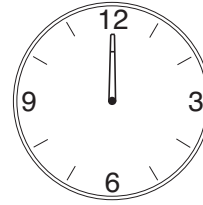
. . . . . o'clock     . . . . . o'clock     . . . . . . o'clock     . . . . . o'clock

**2**

a)  It is 7 am.  What time will it be in 7 hours?     am / pm

b)  It is 4 pm.  What time was it 6 hours ago?     am / pm

c)  It is 8 am.  What time will it be in 12 hours?     am / pm

**3**

a)  What day will it be tomorrow if it was
Wednesday yesterday?     . . . . . . . . . . . . . . . . . .

b)  What day will it be in 2 days' time
if it was Wednesday 2 days ago?     . . . . . . . . . . . . . . . . . .
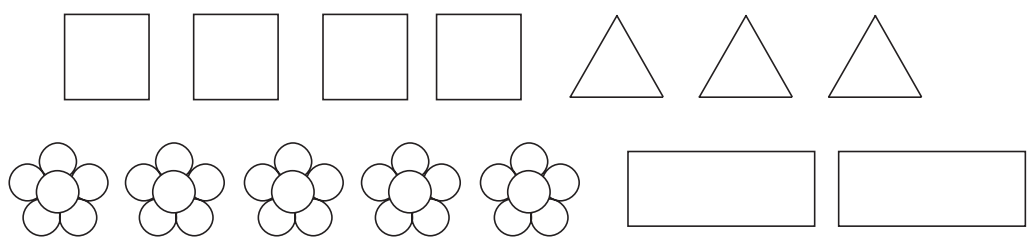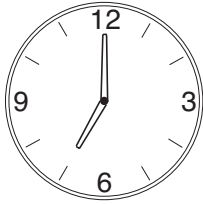
c)  What day will it be in 2 days' time
if it was Saturday yesterday?     . . . . . . . . . . . . . . . . . .

**4**

a)  How many months are there in 1 year and 3 months?

b)  How many months are there in 2 years?

c)  How many months more than 1 year are 18 months?

d)  How many months less than 1 year are 8 months?

e)  How many months less than 2 years are 15 months?

f)  How many months are there in half a year?

**5**

a)  Write down your age:  I am . . . . years and  . . . . months old.

b)  Write down your friend's age:  . . . . . . . . is  . . . . years and  . . . . months.

c)  Who is older and by how much?  . . . . . . . . . . . . . . . . . . . . . . . . . . . .

**1** Put these labels in the correct order by numbering them.

a) | Easter | | New year's day | | Summer holiday | | Christmas |

b) | morning | | evening | | night | | noon | | afternoon |

**2** How much milk do you have in 1 week if you drink 2 pints every day?

*Monday    Tuesday    Wednesday    Thursday    Friday    Saturday    Sunday*

2 pts  +   2 pts   + . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

= [    ][    ]   pints  per week

**3** When did Mary start working today if she has already worked for 2 hours and it is now 11 o'clock?  Draw the hands on the clocks.
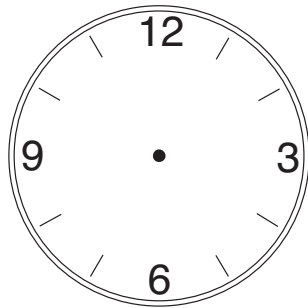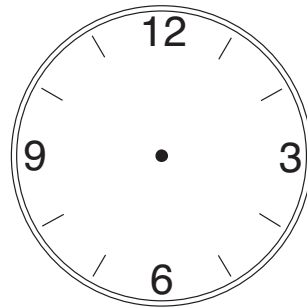


Time now                    Time Mary started

**4** Chris spent 8 days at his aunt's house and 9 days at his grandmother's.

How long was he away from home? [    ][    ][    ][    ][    ][    ] days

= [    ] weeks  and  [    ] days

**5** Jane is spending 3 weeks on holiday at the seaside.

How many days has she left of her holiday if she has been at the seaside for 7 days already? [    ][    ] days

**1**

0      10      20

Fill in the missing numbers.  The arrows mean:   $\xrightarrow{+2}$

| | 0 |

The arrows mean:   $\xrightarrow{+2}$

| | 1 |

The arrows mean:   $\xrightarrow{-2}$

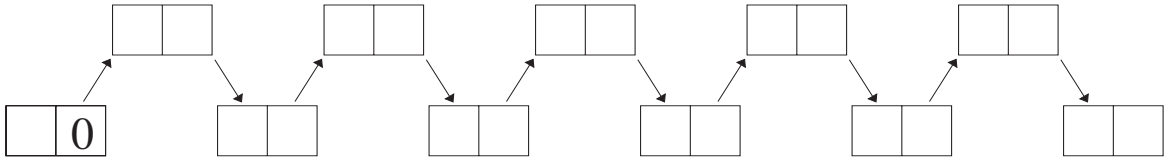| 2 | 0 |

The arrows mean:   $\xrightarrow{-2}$

| 1 | 9 |
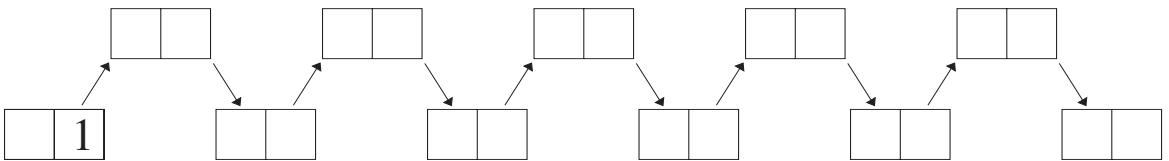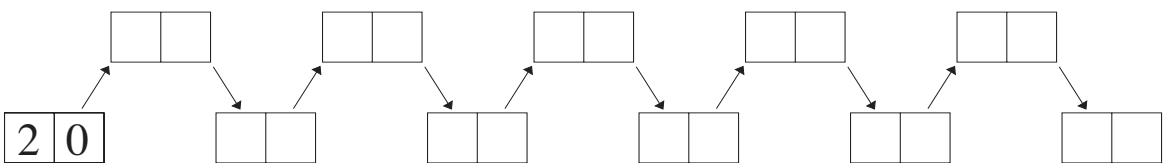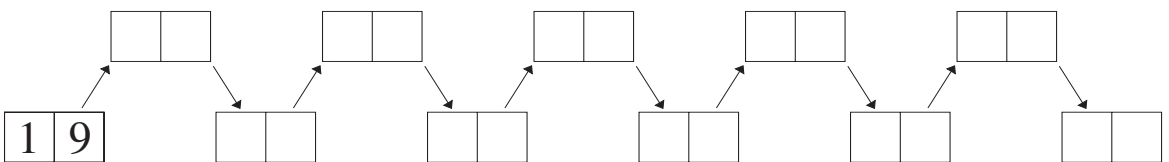
**2**  Complete the table.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| *Next smallest number* | 7 | | | 13 | | | | 0 | 10 |
| *Number* | 8 | 3 | 13 | | | 10 | | | |
| *Next largest number* | 9 | | | | 13 | | 20 | | |

**3**

0                                      18
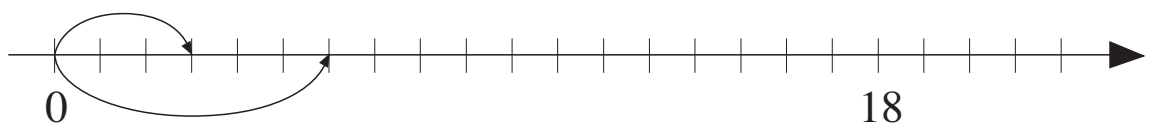
Show your jumps and write the numbers you land on under the number line.

Start at 0 and jump:      a)    3 every time        b)    6 every time.

**1** Continue the pattern. Write the numbers and signs in the boxes.

a)

$1 \xrightarrow{\boxed{+\ 3}} \boxed{\phantom{00}} \xrightarrow{\boxed{+\ 3}} \boxed{\phantom{00}} \xrightarrow{\boxed{\phantom{00}}} \boxed{\phantom{00}} \xrightarrow{\boxed{\phantom{00}}} \boxed{\phantom{00}} \xrightarrow{\boxed{\phantom{00}}} \boxed{\phantom{00}}$

b)

$\boxed{\phantom{0}} \xrightarrow{\boxed{\phantom{00}}} \boxed{\phantom{00}} \xrightarrow{\boxed{\phantom{00}}} \boxed{\phantom{00}} \xrightarrow{\boxed{+\ 3}} 11 \xrightarrow{\boxed{+\ 3}} \boxed{\phantom{00}} \xrightarrow{\boxed{\phantom{00}}} \boxed{\phantom{00}}$

c)

$18 \xrightarrow{\boxed{+\ 2}} \boxed{\phantom{00}} \xrightarrow{\boxed{-\ 3}} \boxed{\phantom{00}} \xrightarrow{\boxed{+\ 2}} \boxed{\phantom{00}} \xrightarrow{\boxed{-\ 3}} \boxed{\phantom{00}} \xrightarrow{\boxed{\phantom{00}}} \boxed{\phantom{00}}$

**2** Continue the sequence in different ways.

a)    1, 2, 4, . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

b)    1, 2, 4, . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

c)    1, 2, 4, . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

**3** Continue the pattern.

a)    1   2   3   4   5   6   7
         1    1    1    1    1    1

b)    1   3   5   7   9
         2    2    2    2

c)    0   4   8   12
         4    4    4

d)    1   2   4   8   16
         1    2    4

**4**            17,  13,  19,  20,  5,  0,  1,  14,  9,  2,  7

Write these numbers in order of:

a)    **increasing** size . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

b)    **decreasing** size . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

**1**

At which numbers have we drawn the pictures?  Write them in.

0    2    □    □ □    □ □    □ □    □ □
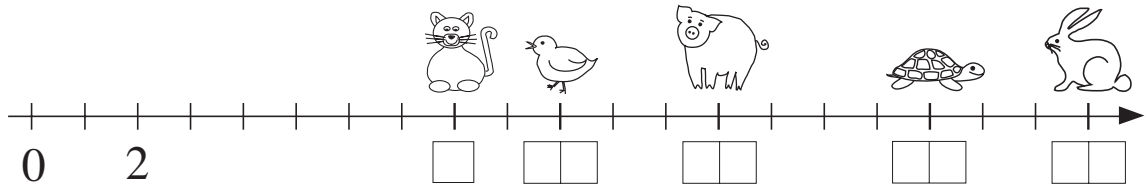
**2**

Ann is making 4 strings of beads.  Where can she put the beads?

①  ⑮  ⑦  ⑤  ⑯  ②  ⑲  ④  ⑭  ⑳  ③
⑩  ⑬  ⑫  ⑨  ⑱  ⑥  ⑰  ⑪  ⑧  ⓪

| even numbers with one digit | odd numbers with one digit | even numbers with two digits | odd numbers with two digits |

**3**

Judy, Andy, Terry and Gary have been shopping.  They each had 11 p.
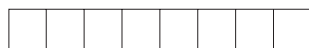How much money do they each have left when they arrive home?

⚬ = 1p        🍐 = 5p        🍎 = 4p        🍌 = 6p

Judy

⑩ ①

Terry

⑩ ①

⑩ ①
Andy
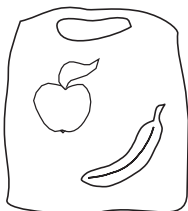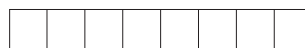
⑩ ①
Gary

**4**

Which numbers could I be thinking of?

a)    More than 9 and less than 13        . . . . . . . . . . . . . . . . . . . . . . . .

b)    Not less than 9 and not more than 13    . . . . . . . . . . . . . . . . . . . . . . . .

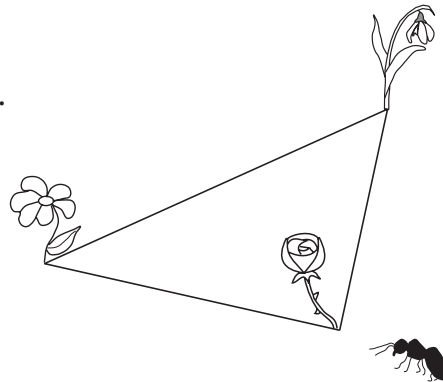**1**  How much money did we spend on stamps if we paid with:

a)  three 5 p coins and were given 2 p change ☐☐ p

b)  two 10 p coins and were given 3 p change ☐☐ p

c)  nine 2 p coins and were given 1 p change ☐☐ p

d)  two 5 p coins and three 2 p coins ☐☐ p

e)  one 5 p coin and one 10 p coin? ☐☐ p

**2**  Measure the distances.

1 cm on the drawing is 10 cm in real life.

Complete the table.



| Path of the ant from: | on the drawing | in real life |
|---|---|---|
| rose to daisy | cm | cm |
| daisy to snowdrop | cm | cm |
| snowdrop to rose | cm | cm |
| Total length of path | cm | cm |

**3**  Divide 19 into 3 numbers.   $a + b + c = 19$   Complete the table.

| $a$ | 4 | 5 |  |  | 5 | 4 | 6 |  | 8 | 3 | 12 |  | 4 | 3 | 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $b$ | 5 | 5 | 3 | 9 |  | 4 | 6 | 7 | 9 |  | 3 | 7 |  |  | 1 |
| $c$ | 10 |  | 13 | 9 | 6 |  |  | 8 |  | 8 |  | 7 | 9 | 9 |  |

**1** Use one operation instead of two.

Fill in the missing numbers and signs on the arrows.

a)
5 →[+7]→ [ ][ ] →[+3]→ [ ][ ]
[ ][ ]

b)
12 →[−7]→ [ ][ ] →[−3]→ [ ][ ]
[ ][ ]

c)
9 →[+7]→ [ ][ ] →[−3]→ [ ][ ]
[ ][ ]

d)
18 →[−7]→ [ ][ ] →[+3]→ [ ][ ]
[ ][ ]

e)
6 →[+3]→ [ ][ ] →[ ][ ]→ [ ][ ]
[+1 0]

f)
20 →[−3]→ [ ][ ] →[ ][ ]→ [ ][ ]
[−1 0]

---

There were 16 cabbages in Rabbit's garden.
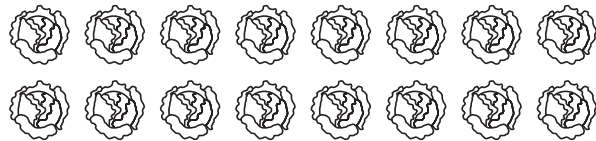
On Monday, he ate 8 of them.

On Tuesday he finished half of the remaining cabbages.
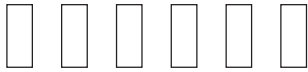
Cross out the cabbages he ate.

How many cabbages were left for Wednesday?  [ ] cabbages

---

**3**

a)  10 − 3 = [ ]

14 − 6 = [ ]

4 + [ ][ ] = 14

13 + [ ] = 15

15 − 7 = [ ]

[ ][ ] − 15 = 3

2 + [ ][ ] = 17

b)  13 − 8 = [ ]

11 − 8 = [ ]

5 + 12 = [ ][ ]

[ ] + 14 = 18

16 − 11 = [ ]

13 − [ ] = 4

[ ] + 15 = 19

c)  20 − [ ][ ] = 5

3 + [ ][ ] = 18

8 + [ ][ ] = 19

[ ] + 13 = 18

[ ] − 7 = 4

[ ][ ] − 11 = 6

0 + 18 = [ ][ ]

**1** Complete the picture to make 16.

☐ ☐ ☐ ☐ ☐ ☐

**2** a) Join the sums to the correct point on the number line.

| 18 − 9 | | 6 + 7 | | 8 + 5 − 3 |

0 ☐ ☐ 10 ☐ 20
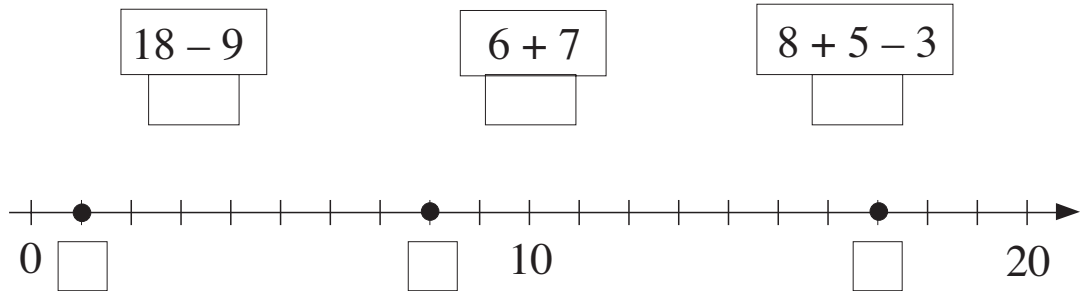
b) Fill in the missing numbers below the dots already drawn on the line.

**3** Fill in the missing numbers.

a) $6 + \boxed{\phantom{0}} = 8$

b) $\boxed{\phantom{0}\phantom{0}} + 7 = 17$

c) $11 + \boxed{\phantom{0}} = 15$

d) $19 - \boxed{\phantom{0}} = 13$

e) $\boxed{\phantom{0}\phantom{0}} - 5 = 8$

f) $12 - \boxed{\phantom{0}} = 3$

**4** Fill in the missing signs. (<, >, =)

$5 \boxed{\phantom{0}} 8$ $9 \boxed{\phantom{0}} 14$ $16 \boxed{\phantom{0}} 13$

$2 + 7 \boxed{\phantom{0}} 3 + 6$ $4 + 5 \boxed{\phantom{0}} 6 + 7$ $10 + 3 \boxed{\phantom{0}} 1 + 11$

$8 - 1 \boxed{\phantom{0}} 15 - 12$ $6 + 8 \boxed{\phantom{0}} 17 - 3$ $4 + 14 \boxed{\phantom{0}} 13 + 3$

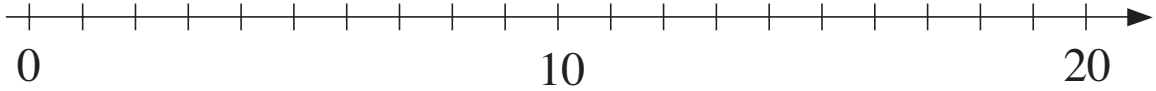**5** Which two numbers do you think come next?

a) 3, 5, 7, 9, ☐ , ☐

b) 16, 14, 12, 10, ☐ , ☐

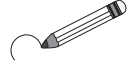**6** Put these numbers into **decreasing** order: 3, 15, 11, 0, 4, 7, 19, 18
Write the correct signs between them.

. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

**1**



0                    10                    20

a)   Mark the even numbers in red on the number line.

b)   Mark with a blue star the numbers which are smaller than 12.
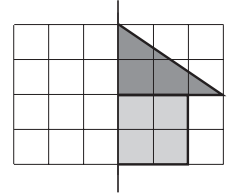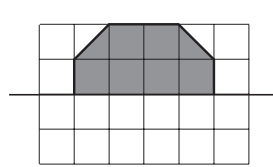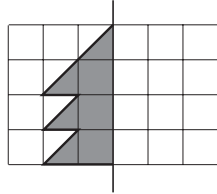
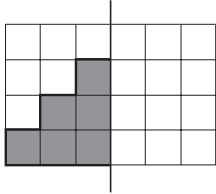c)   Circle in green the numbers greater than 8.

**2**   Fill in the missing numbers.

a)   $6 + 7 = 20 - \boxed{\phantom{0}}$          b)   $7 + 6 + 2 <_1 19 - 3 - \boxed{\phantom{0}}$

$17 - 3 = 5 + \boxed{\phantom{0}}$               $18 - 3 + 1 <_3 5 + 9 + \boxed{\phantom{0}}$

$8 + \boxed{\phantom{0}} \;_1\!\!> 13 - 4$          $15 - 2 <_2 \boxed{\phantom{0}}\boxed{\phantom{0}} - 2$

$16 - \boxed{\phantom{0}} <_3 20 - 8$               $9 + 8 \;_1\!\!> \boxed{\phantom{0}} + 9$

$6 + 7 + \boxed{\phantom{0}} = 20 - 2 - 1$          $13 - \boxed{\phantom{0}} \;_3\!\!> 13 - \boxed{\phantom{0}}$

$8 + 9 - \boxed{\phantom{0}} = 17 - 9 + 4$          $7 + \boxed{\phantom{0}} <_1 9 + \boxed{\phantom{0}}$

**3**   Put a mirror on the line.  What does the picture look like?
Draw what you can see in the mirror.



**4**   Tony has 4 p.                    ① ① ① ①
Elizabeth has 2 p more than Tony.   ① ① ① ①
Patrick has 2 p more than Elizabeth. ① ① ① ①

Continue the drawing.

a)   How much money does Elizabeth have?     $\boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}$ p

b)   How much money does Patrick have?     $\boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}$ p

c)   How much money do the 3 children
have altogether?     $\boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}$ p

**1** Half of the 16 apples, plus 3 more apples, are red and the others are yellow.
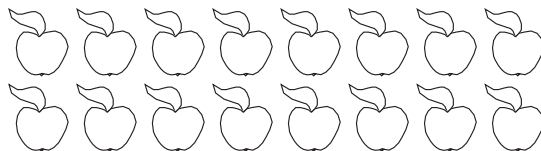
Colour the picture to show this.

a)   How many red appples are there?

b)   How many yellow apples are there?

c)   How many more red apples than yellow apples are there?

**2** a)   What is the largest 1-digit number?

b)   What is the smallest 2-digit number?

c)   What is the largest 1-digit even number?
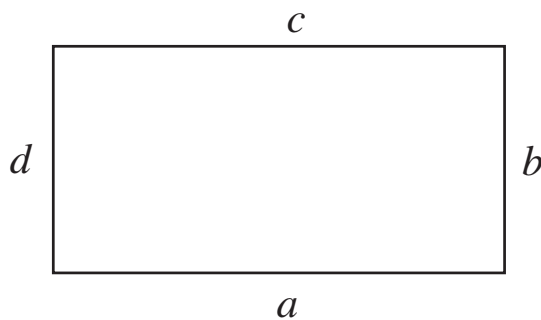
d)   What is the smallest 2-digit odd number?

**3** Measure the sides of the rectangle.

$a =$ ☐ cm          $b =$ ☐ cm

$c =$ ☐ cm          $d =$ ☐ cm

The **total** length of the 4 sides is:

☐ cm + ☐ cm + ☐ cm + ☐ cm = ☐ cm

**4** Start at the dot.   ↗→↘↓↓↓↓↗←↖↘↙←↖↑↑↑↗→↘↑↑↑↗→↘↓↓↖↘↙
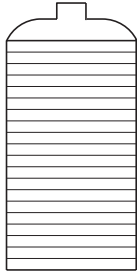
Each arrow is one step in the direction shown.
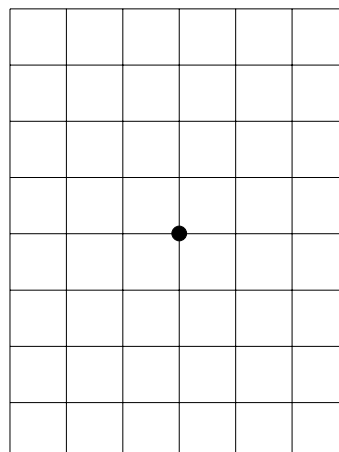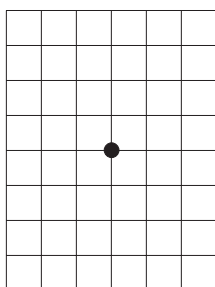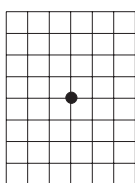
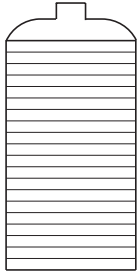**1** Each bottle contains enough for 20 cups of orange squash.
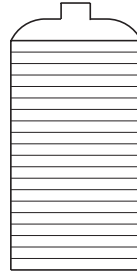
Colour in how much is left if we pour out:

a)   10 cups          b)   5 cups          c)   12 cups          d)   8 cups
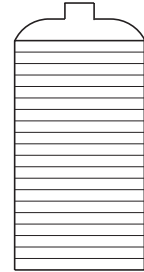
**2** Which numbers could I be thinking of?

a)   More than 11 and less than 15:   . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

b)   More than 11 and not more than 15:   . . . . . . . . . . . . . . . . . . . . . . . . . .

c)   Not less than 11 and less than 15:   . . . . . . . . . . . . . . . . . . . . . . . . . . . .

d)   Not less than 11 and not more than 13:   . . . . . . . . . . . . . . . . . . . . . . . .

**3** Cockerel and Duck live opposite each other.

The length their steps are:   Cockerel's          Duck's

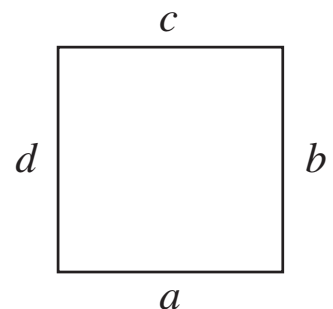How many steps does Cockerel take when he goes to visit Duck?

How many steps does Duck take when he goes to visit Cockerel?

**4** Measure the sides of the square.

$a$ = ⬜ cm,          $b$ = ⬜ cm,

$c$ = ⬜ cm,          $d$ = ⬜ cm

$c$

$d$          $b$

$a$

The **total** length of the 4 sides is:

⬜ cm + ⬜ cm + ⬜ cm + ⬜ cm = ⬜⬜ cm

## 1

The same letter stands for the same number.

$$A + N + N + A = 20$$

Which number could each letter stand for?  Write your answers in the table.

A |   |   |   |   |   |   |   |   |   |   |   |   |
N |   |   |   |   |   |   |   |   |   |   |   |   |

## 2

We know the following about 4 children.

Kate is taller than Pat.
Kate is shorter than Chris.
Pat is shorter than Louise.
Louise is taller than Chris.
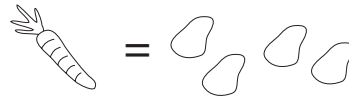
Louise

Kate            Pat

Chris

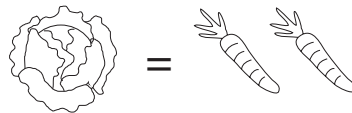Write down their names in **increasing** order of height.

. . . . . . . . . . . .    . . . . . . . . . . .    . . . . . . . . . . . .    . . . . . . . . . . . .

## 3

1 carrot costs the same as 4 potatoes.
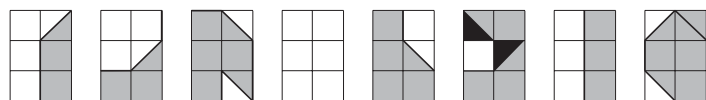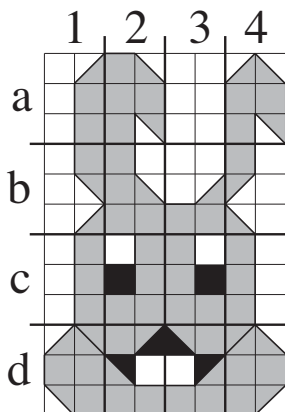
1 cabbage costs the same as 2 carrots.

How many potatoes cost the same as
a cabbage?  Complete the drawing.

## 4

We have divided the picture up into 16 pieces.
Write below each piece where you can find it on the grid.

1   2   3   4

a

b

c

d

1 a