Q1.

The height of the tallest person in history is 8 feet 11 inches.

Conversion table	
One foot	30 centimetres
One inch	2.5 centimetres

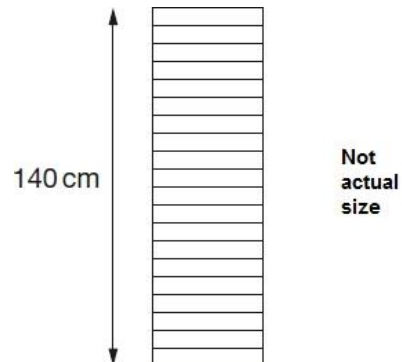Use this conversion table to calculate the height of the tallest person, in **centimetres**.

2 marks

Show your method

cm

Q2.

A stack of 20 identical boxes is 140 cm tall.

140 cm

Not actual size

Stefan takes **three** boxes off the top.

How tall is the stack now?

Show your method

cm

2 marks

Q3.

Jacob cuts **4** metres of ribbon into **three** pieces.

The length of the first piece is **1.28** metres.

The length of the second piece is **1.65** metres.

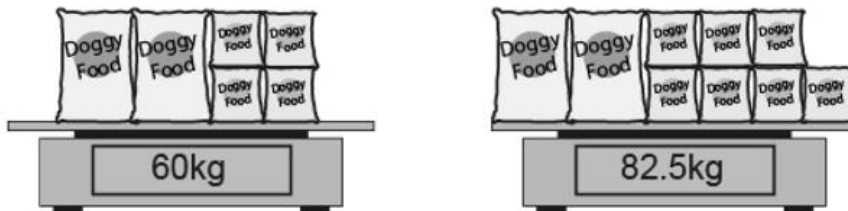Work out the length of the third piece.

Show your method

metres

2 marks

Q4.

The balances show the **combined** masses of some large bags of dog food and some small bags of dog food.

60kg

82.5kg

How much does each bag-size weigh?

Large bag =   kg

Small bag =   kg

2 marks

Q5.

(a) 1 kilogram of grapes costs £5.80

Megan buys 700 grams of grapes.

How much does she pay?

£ [   ]

1 mark

(b) 1 kilogram of cheese costs £13.50

Megan buys a piece of cheese costing £2.49

£2.49

What is the mass of the cheese to the **nearest 100 grams**?

2 marks

Show your method

[g]

Q6.

Freddie is half as tall as his mother.

Freddie is one metre shorter than his father.

Freddie's father is 180 centimetres tall.
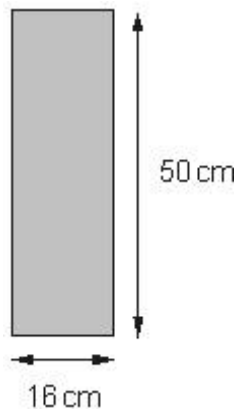
How many centimetres tall is Freddie's mother?
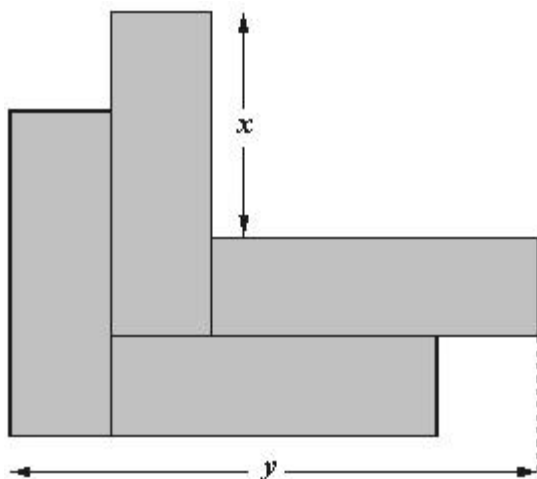
[cm]

1 mark

Q7.

Kate has some rectangles.

They each measure 16 centimetres by 50 centimetres.

Not actual size

She makes this design with four of the rectangles.

Work out the lengths x and y.

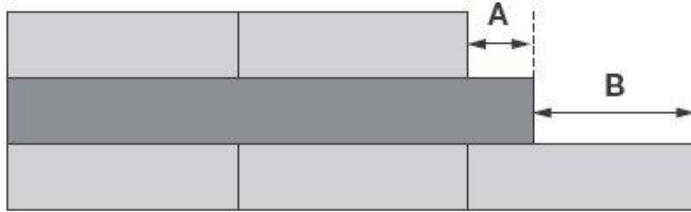| $x =$ | cm |

1 mark

| $y =$ | cm |

1 mark

Q8.

Liam has two different sizes of rectangle.

He makes this pattern with them.

Not actual size

Calculate the lengths of **A** and **B**.

A =   cm

1 mark

B =   cm

1 mark

Q9.

A 5p coin has a diameter of 1.8 centimetres.

1.8 cm

Holly makes a straight line of 5p coins worth £10

£10

How long is Holly's line?
Give your answer in **metres**.

2 marks

Show your method

metres

Mark schemes

Q1.

Award **TWO** marks for 267.5 **OR** $267\frac{1}{2}$ (cm)

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g.

- 30 × 8 = 210 *(error)*
  2.5 × 11 = 27.5
  210 + 27.5

OR

- 30 ÷ 2.5 = 12
  8 × 12 + 11 = 106 *(error)*
  106 × 2.5

OR

- 12 inches = 1 ft
  1 ft + 8 ft = 9 ft
  30 × 9 = 270
  270 − 2.5

*Answer need not be obtained for the award of **ONE** mark.*

Up to 2m

[2]

Q2.

Award **TWO** marks for the correct answer of 119.

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g.

- 140 ÷ 20 = 7
  3 × 7 = 21
  140 – 21

OR

- 140 ÷ 20 = 7
  20 – 3 = 17
  17 × 7

*Answer need not be obtained for the award of **ONE** mark.*

Up to 2m

[2]

Q3.

Award **TWO** marks for the correct answer of 1.07.

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g.

- 1.28 + 1.65 = 2.93
  4 − 2.93

OR

- 4 − 1.28 = 2.72
  2.72 − 1.65

OR

- 4 − 1.65 = 2.35
  2.35 − 1.28

> *Accept for **ONE** mark an answer of 107 metres as evidence of an appropriate method.*
>
> *Answer need not be obtained for the award of **ONE** mark.*

Up to 2m

[2]

Q4.

a. Large bag = 15kg

1

b. Small bag = 7.5kg

1

[2]

Q5.

(a)   £4.06

> *!   Money*
> *See guidance*

1

(b)   200

> *!   Measures*
> *See guidance*

2

or

Gives an answer of 180 or 184 or 184.4(…)

OR

Shows or implies a complete correct method, eg:

- 1000 × 2.49 ÷ 13.50

- £13.50 ÷ £2.49 = 5.42

  1000 ÷ 5.42

- 1350 ÷ 1000 = 1.35

$$249 ÷ 1.35$$

- £1.35 = 100

  £2.70 = 200

  ! Inconsistent units
  Within an otherwise correct method, condone
  eg, for 1 mark accept:
  - *(£)13.50 ÷ 1000 = 1.35(p)*
    (£)2.49 ÷ 1.35(p)
  - *(£)13.50 ÷ 1000 = (£)0.0135*
    249(p) ÷ (£)0.0135

1

[3]

Q6.

160

U1

[1]

Q7.

  (a)   34

1

  (b)   82

1

[2]

Q8.

  (a)   5

1

  (b)   15

If the answer is incorrect, award the mark if the answers to
(a) and (b) total 20

U1

[2]

Q9.

Award TWO marks for the correct answer of 3.6

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, eg:

- 10 ÷ 0.05 = 200
  200 × 1.8 = 360
  360 ÷ 100

OR

• 20 5p coins make £1
200 5p coins make £10
200 × 0.018

> *Answer must be in metres for the award of **TWO** marks.*
>
> *Accept for **ONE** mark 360 centimetres.*
>
> *If the answer is incorrect, accept for **ONE** mark an answer of 36 multiplied by any power of 10 with no evidence of an incorrect method.*
>
> *Answer need not be obtained for the award of **ONE** mark.*

Up to 2

[2]