

# Numeracy for Work and Community Life

## Skills and Applications Task

### Task 4

1. With a partner complete the Distance in Metres activity sheet.  
You will need to estimate the distance you can throw or kick an object, then measure the distance accurately. You then need to convert measurements as indicated.
2. Work through the 7 questions on the worksheet provided. Complete all calculations on the sheet. You may use a calculator to help you, or you can ask for help.
3. Complete the 3 questions distributed on perimeter of the rectangle and two triangles. Show any working out that is necessary and circle the correct answer.
4. Complete the worksheet on 'Finding the Area'; set all work out neatly on the page provided for your calculations.
5. Complete the 3 activities on measuring an angle. Write your answers clearly in the box provided.

## Numeracy for Work and Community Life

### MEASUREMENT:

Record your best javelin throw

In metres 23.22

Convert to centimetres 2302.22 cm

Convert to millimeters 23022

What measurement is best used to measure your throw? Meters

Why do you think this is the best measurement? Because it's the easy to measure the throw

Record your best discus throw.

In metres 23

Convert to centimetres 2300 cm

Convert to millimeters 23000 mm

Record your best shot put.

In metres 10.20

Convert to centimetres 1020 cm

Convert to millimetres 10200 mm

## Numeracy for Work and Community Life

Distances Metres  
In Metres

Estimate

Actual

~~40~~

48.30

Estimate your best kick.

40 / ~~48.30~~

44.70

Estimate the distance from the boarding house to Mackee Mall.

60m / ~~75m~~

75m

Estimate the distance you can throw a ball.

67

41.35

My best kick was 48.30 and the ~~the~~ <sup>second</sup> other kick was 44.70

this is 48300cm

this is 483,000

The lengths of two lines are 475mm and 47cm respectively. Which line is shorter length?

47.

Creepy the snail crawls 25mm whilst Slimey the slug moves 1.9cm. What is the total distance (in cm) travelled by Creepy and Slimey?

$$\begin{array}{r} 2.5 \\ 1.9 \\ \hline 4.4 \end{array}$$

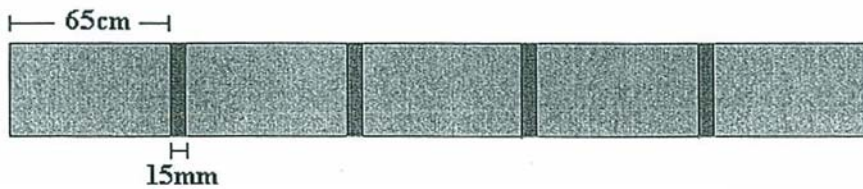
In the same period of time, a snail moves 5cm, a student walks 30m and a bird flies 1.2km. Find the total distance (in metres) travelled by all three in this time.

$$\begin{array}{r}
 5\text{cm} \\
 30.0 \\
 1200.0 \\
 \hline
 1230.5
 \end{array}$$

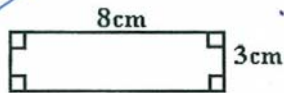
A plan shows the length of a wall as 2.5m and the width of a window as 760cm. What is the difference (in metres) between the length of the wall and the width of the window?

$$\begin{array}{r}
 7.60\text{m} \\
 2.50 \\
 \hline
 5.1
 \end{array}$$

A path is made of 5 concrete slabs each 65cm long. There is 15mm of grouting between the tiles as shown in the diagram:

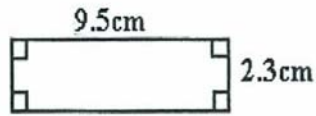


What is the length of the path? Express your answers in metres.



The perimeter is:

A. 11cm      B. 24cm      **C. 22cm**      D. 48cm



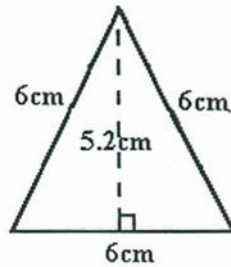
The perimeter is:

A. 23.6cm

B. 11.8cm

C. 21.85cm

D. 43.7cm



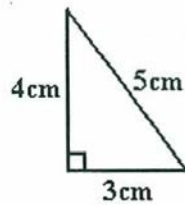
The perimeter of the triangle is:

A. 9cm

B. 18cm

C. 15.6cm

D. 31.2cm



The perimeter of the triangle is:

A. 6cm

B. 12cm

C. 60cm

D. 30cm

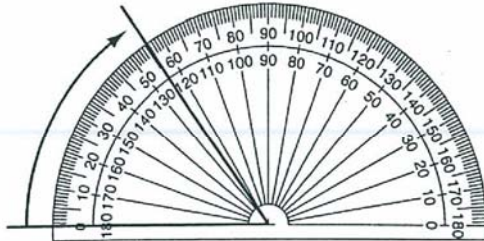
$$\begin{array}{r}
 9.5 \\
 \times 2 \\
 \hline
 19.0 \\
 + 4.6 \\
 \hline
 23.6
 \end{array}$$

$$\begin{array}{r}
 2.3 \\
 \times 2 \\
 \hline
 4.6
 \end{array}$$

- Place the centre of the protractor at the corner (vertex) of the angle.
- Align one line of the angle with a zero line on the protractor.
- Take the reading from where the second line of the angle crosses the scale on the protractor.

Hint: Protractors can be read using either the inside or outside scale depending on which zero is used.

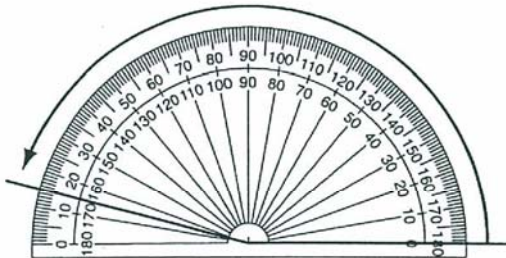
Q. Using the protractor measure the size of the angle shown.



A.  $55^\circ$

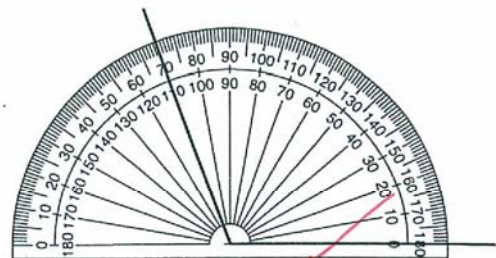
Read from the outside scale.  
One line of the angle is at  $0^\circ$  and the other line of the angle extends around to  $55^\circ$ .

a) Using the protractor measure the size of the angle shown.



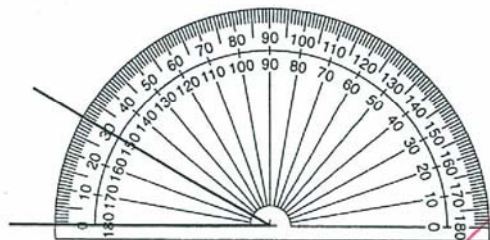
165°

b) Using the protractor measure the size of the angle shown.



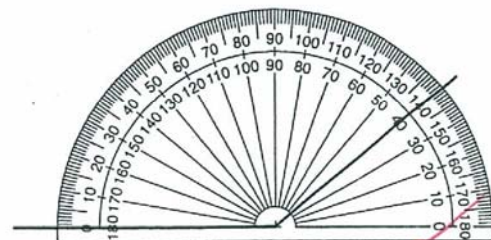
110

c) Using the protractor measure the size of the angle shown.



30

d) Using the protractor measure the size of the angle shown.



140

- Match the point of the angle and a corner of a Maths Mate.
- Align one line of the angle with a side of the page. If the other line of the angle extends beyond the page, then the angle is greater than a right angle.

Example: Turning a quarter of the way around a circle is turning at right angles.

Hint: A right angle measures  $90^\circ$  (degrees). It is marked with a corner.



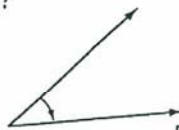
Q. Is the angle shown below "less than", "equal to" or "greater than" a right angle?



A. **greater than**

The angle appears greater than  $90^\circ$ .  
Check by placing the corner of a Maths Mate inside the angle.

a) Is the angle shown below "less than", "equal to" or "greater than" a right angle?



less than

b) Is the angle shown below "less than", "equal to" or "greater than" a right angle?



greater than

c) Is the angle shown below "less than", "equal to" or "greater than" a right angle?



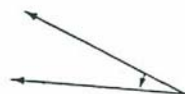
equal to

d) Is the angle shown below "less than", "equal to" or "greater than" a right angle?



greater than

e) Is the angle shown below "less than", "equal to" or "greater than" a right angle?



less than

f) Is the angle shown below "less than", "equal to" or "greater than" a right angle?



less than

# Numeracy for Work and Community Life

## Finding the Area

Mr White is constructing the garden beds in the vegie garden for planting. The total area he can use in the garden is 40 square metres.

1. One planter box is 4 metres by 3 metres, what is the area of the planter box?

$$\begin{aligned} A &= L \times W \\ &= 3\text{m} \times 4\text{m} \\ &= 12\text{m}^2 \end{aligned}$$

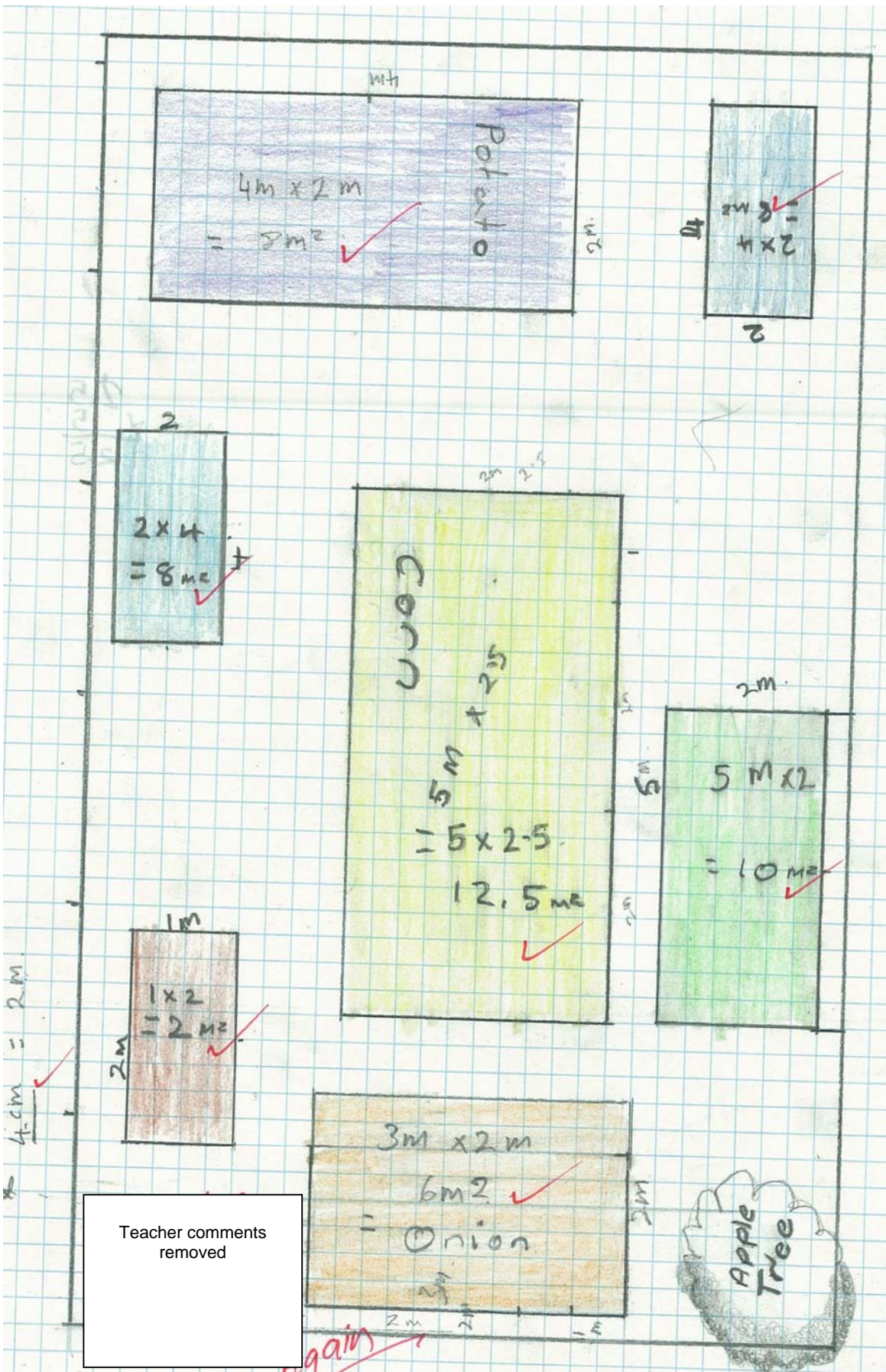
2. How many planter boxes of 4 metres by 3 metres could fit in the garden area?

$$\begin{aligned} 1 \text{ Planter Box} &= 12\text{m}^2 \\ 2 \text{ Planter Boxes} &= 24\text{m}^2 \\ 3 \text{ Planter Boxes} &= 36\text{m}^2 \end{aligned}$$

3. Design your own vegie garden. You have an area of 65 square metres.

Plan out your vegie garden into planter boxes or garden beds. Allow for paths and shaded areas as well.

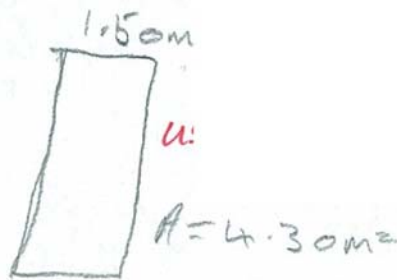
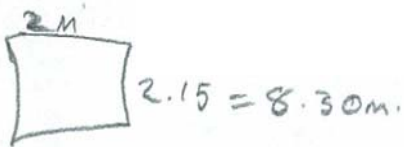
i



$$\begin{array}{r}
 3.15 \\
 \times 15 \\
 \hline
 15.75 \\
 31.5 \\
 \hline
 47.25 \text{ m}^2
 \end{array}$$

$$\begin{aligned}
 A &= L \times B \text{ m}^2 \\
 1.5 \times 3.15 \\
 &= 4.725 \text{ m}^2
 \end{aligned}$$

$$\begin{aligned}
 &(1.5 + 1.5) + (3.15 + 3.15) \\
 &= 3 + 6.30 \\
 &= 9.30 \text{ m} \checkmark
 \end{aligned}$$



$$\begin{array}{r}
 2.15 \\
 \times 2 \\
 \hline
 4.30 \checkmark
 \end{array}$$

The perimeter of the raised garden bed is measuring...

