## MON



## WEDS



## TUES



## THURS





Write the letter for each triangle in the correct region of the sorting diagram.
One has been done for you.


Practise 2: 270

Practise 3: False - a triangle could have angles of 60,60,60, plus many other options.

Here are some angles.
A

C

E

B


F

a) Sort the angles into the table.

| Acute angle | Obtuse angle | Right angle | Reflex angle |
| :---: | :---: | :---: | :---: |
| c | D |  | A |
| E | F |  |  |

2) What is the size of each angle? Circle your answer.
a)

$140^{\circ}$
b)

$61^{\circ}$


2 a) Complete the fact family for the bar model.

b) Tick the calculation in part a) that helps you work out the value of $a$.
c) Work out the value of $a$.

d) How does the bar model help you to calculate angle $a$ ?


2 Work out the sizes of the unknown angles.
Give reasons for your answers.

$x=41^{\circ}$ because angles is


ARE 1
$P Q$ is a straight line.
Not drawn accurately


Calculate the size of angle $x$.

ARE 3
Jamie draws a triangle.
He says,

He can't be correct because obtuse angles must be over $90^{\circ}$, so two obtuse angles are already over $180^{\circ}$ before even adding the third angle. The total would be over $180^{\circ}$.
'Two of the three angles in my triangle are obtuse'.
Explain why Jamie cannot be correct.

## ARE 6

Calculate the size of angles $\boldsymbol{a}$ and $\boldsymbol{b}$ in this diagram.



5 Work out the unknown angles.
a)

c)

b)

d)

b)

c)


ARE 8
The diagram shows two overlapping squares and a straight line.


Calculate the value of angle $\boldsymbol{x}$ and the value of angle $\boldsymbol{y}$.

7 Use the information to work out the unknown angles.
a) Angle $a$ is half the size of angle $b$.
b) Angle $a$ is four times the size of angle $b$.

$$
\begin{aligned}
& a=120^{\circ} \\
& b=240^{\circ}
\end{aligned}
$$

8 The pie chart shows some children's favourite snacks.


A quarter of the children said chocolate was their favourite snack.
Five times as many children voted for fruit as voted for sweets.
Work out the size of the angle for each sector in the pie chart.


7 Angle $f$ is one quarter of the size of angle $g$. Angle $f$ is $28^{\circ}$.


Are angles $x$ and $y$ vertically opposite? $\qquad$
Explain your answer.

$$
\begin{aligned}
& 28 \times 4=112 \\
& 112+28=140
\end{aligned} \text { so } \quad g=112^{\circ}
$$

$139 \neq 140$ theregore the diagran does not show vertically epposite anglon.

5 Work out the size of angle $x$.


5 Two isosceles triangles are joined to form a kite.
a) Work out the sizes of the unknown angles.


$$
w=38^{\circ} \quad y=38^{\circ} \quad x=56^{\circ} \quad z=56^{\circ}
$$

b) Work out $w+x$.

$$
94^{\circ}
$$

c) Work out $y+z$.

What do you notice? Talk about it with a partner.

