## Year 6 Angles

Q1. Here are five angles marked on a grid of squares.


Write the letters of the angles that are obtuse.

[^0]Write the letters of the angles that are acute.

Q2. The diagram shows a shaded octagon on a square grid.
Line $\mathbf{A}$ joins two vertices of the octagon.
Join two other vertices to draw a line parallel to line $\mathbf{A}$.
Use a ruler.


Join two vertices to draw a line perpendicular to line $\mathbf{A}$.

Use a ruler.


Q3. This diagram has four angles marked $\mathbf{A}, \mathbf{B}, \mathbf{C}$ and $\mathbf{D}$.


Write the letters of the angles that are obtuse angles.


Q4. On the grid join dots to make a triangle which does not have a right angle.
Use a ruler.


Q5. Calculate the size of angle $\boldsymbol{x}$ in the diagram.
Do not use a protractor (angle measurer).


Q6. Two of the angles in a triangle are $70^{\circ}$ and $40^{\circ}$
Jack says,


Explain why Jack is not correct.


Q7. Layla completes one-and-a-half somersaults in a dive.


How many degrees does Layla turn through in her dive?

Q8. A shaded isosceles triangle is drawn inside a rectangle.


## Not

to scale

Calculate the size of angle $\boldsymbol{a}$.


Q9. Here is a rectangle.


Not to
scale

Calculate the size of angles $\boldsymbol{a}$ and $\boldsymbol{b}$.
Do not measure the angles.


1 mark

$$
b=\square
$$

Q10. $P Q$ is a straight line.

Not drawn accurately


Calculate the size of angle $x$.

Do not use a protractor (angle measurer).


Q11. This shape is three-quarters of a circle.


How many degrees is angle $\boldsymbol{x}$ ?

Q12. $A B C D$ is a rectangle.


What are the values of the missing angles?


Q13. Look at angles $\boldsymbol{a}, \boldsymbol{b}, \boldsymbol{c}, \boldsymbol{d}$ and $\boldsymbol{e}$


Write the angles in order of size, starting with the smallest.

smallest

Q14. Here is a regular octagon.


Calculate the sizes of angles $\boldsymbol{a}$ and $\boldsymbol{b}$


1 mark


Q15. Calculate the size of angles $\boldsymbol{a}$ and $\boldsymbol{b}$ in this diagram.


1 mark

$$
b=\square
$$

1 mark

Q16.
Anna has four different triangles.
Complete the table to show the size of the angles in each triangle.

| Type of triangle | Angle 1 | Angle 2 | Angle 3 |
| :---: | :---: | :---: | :---: |
| Isosceles | $90^{\circ}$ |  |  |
| Right-angled | $80^{\circ}$ |  |  |
| Isosceles | $70^{\circ}$ |  |  |
| Isosceles | $70^{\circ}$ |  |  |

Q17.


Calculate the size of angle $\boldsymbol{p}$ in the diagram.
Do not use a protractor (angle measurer).


Q18. The diagram shows an isosceles triangle and a square on a straight line.


Calculate angle $\alpha$.


Q19.


## Not to scale

Calculate the size of angle $\boldsymbol{y}$ in this diagram.
Do not use a protractor (angle measurer).

Q20. Here is an isosceles triangle.


Calculate the size of angle $x$.
Do not use a protractor (angle measurer).


[^0]:    1 mark

