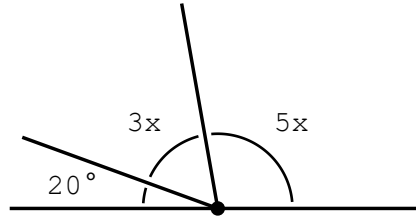


Geometry: 2D Shapes & Angles: Hard Practice

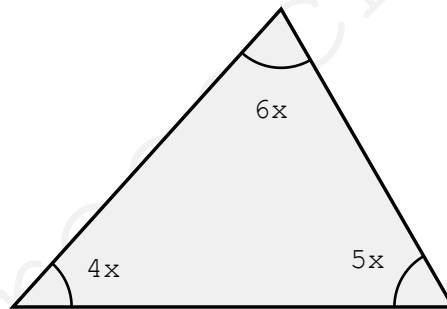
Paper 6

Q1. Work out the value of x .



- A. 15 B. 20 C. 22.5 D. 25 E. 30

Q2. Work out the size of the largest angle in this triangle.

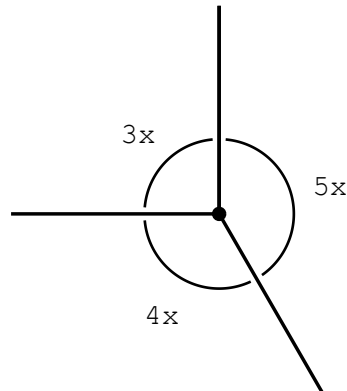


- A. 12° B. 48° C. 60° D. 72° E. 90°

Q3. Each interior angle of a regular polygon is 156° . How many sides does it have?

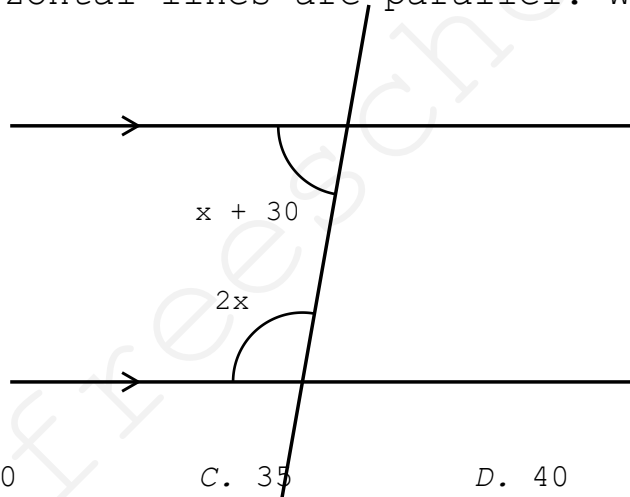
- A. 12 B. 13 C. 15 D. 18 E. 24

Q4. These three angles meet at a point. Work out the value of x .



- A. 24 B. 30 C. 36 D. 40 E. 45

Q5. The two horizontal lines are parallel. Work out the value of x .



- A. 20 B. 30 C. 35 D. 40 E. 50

Q6. An exterior angle of a triangle is 125° . The two interior angles opposite it are x and $2x + 20$. What is the value of x ?

- A. 25 B. 30 C. 35 D. 40 E. 45

Q7. A regular pentagon and a square are drawn on a page so that they share one whole side. What is the size of the angle between them at one of the shared corners?

- A. 162° B. 168° C. 180° D. 192° E. 198°

Q8. The interior angles of a polygon add up to $2,880^\circ$. How many sides does it have?

- A. 16 B. 17 C. 18 D. 20 E. 22

Q9. A regular polygon with 12 sides is split into 12 equal triangles by joining every corner to its centre. What is the angle at the centre of each triangle?

- A. 15° B. 30° C. 36° D. 45° E. 60°

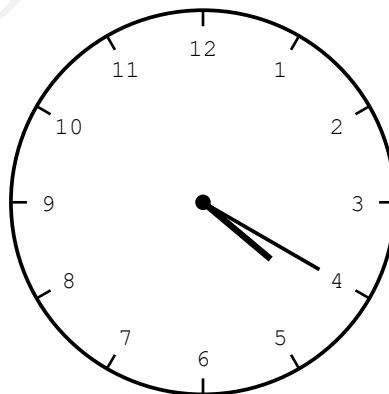
Q10. How many diagonals can be drawn inside a hexagon?

- A. 6 B. 8 C. 9 D. 12 E. 18

Q11. The angles of a quadrilateral are in the ratio 3 : 4 : 5 : 8. What is the size of the largest angle?

- A. 108° B. 120° C. 144° D. 160° E. 180°

Q12. What is the size of the angle between the hands of this clock?

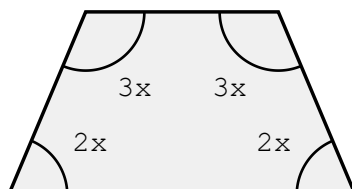


- A. 0° B. 10° C. 20° D. 30° E. 40°

Q13. Three angles meet at a point. Two of them are 48° and 76° , and the third is reflex. How big is the reflex angle?

- A. 124° B. 214° C. 226° D. 236° E. 246°

Q14. Work out the value of x in this trapezium.



- A. 30 B. 36 C. 40 D. 45 E. 72

Q15. A regular polygon has 40 sides. What is the size of each exterior angle?

- A. 4° B. 9° C. 18° D. 40° E. 171°