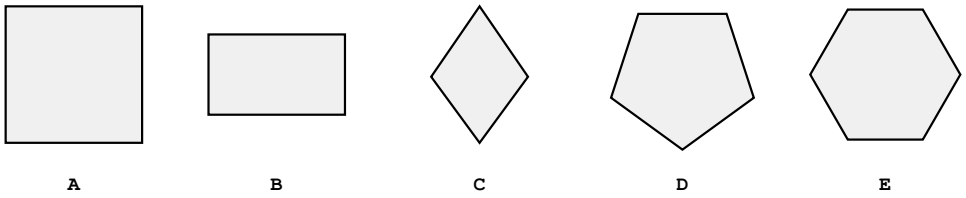
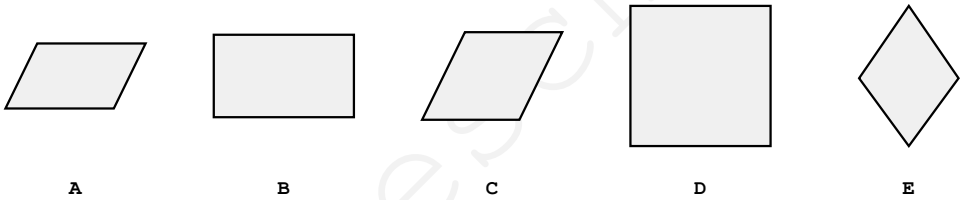
Geometry: 2D Shapes & Angles: Medium Practice Paper 6

Q1. Which of these shapes has exactly 2 lines of symmetry?



A. A *B.* B *C.* C *D.* D *E.* E

Q2. Which of these shapes has rotational symmetry of order 2 but NO lines of symmetry?



A. A *B.* B *C.* C *D.* D *E.* E

Q3. Which of these sets of angles could be the three angles of a triangle?

A. 20°, 70°, 80°

B. 30°, 60°, 90°

C. 40°, 60°, 90°

D. 45°, 45°, 100°

E. 60°, 60°, 70°

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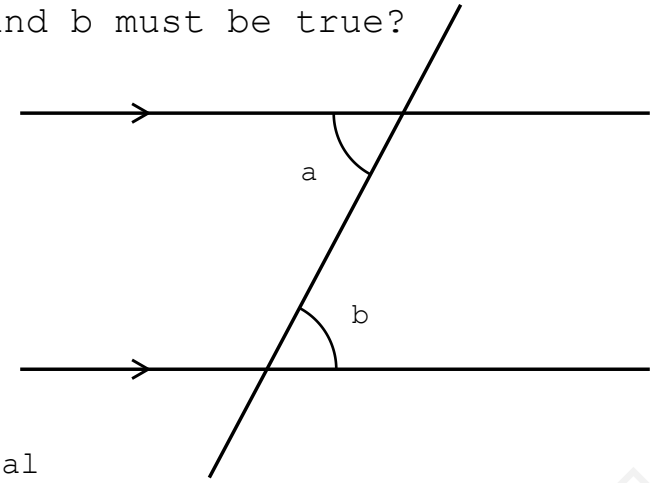
Q4. The two horizontal lines are parallel. Which statement about angles a and b must be true?



A. a and b are equal

B. a and b add up to 180°

C. a is twice as big as b

D. b is bigger than a

E. It cannot be decided

Q5. The exterior angles of any polygon, taken one at each vertex, always add up to the same total. What is it?

A. 90°

B. 180°

C. 360°

D. 540°

E. It depends on the number of sides

Q6. The interior angle at one vertex of a regular polygon is 140°. What is the exterior angle at that same vertex?

A. 20° *B.* 40° *C.* 50° *D.* 140° *E.* 220°

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Q7. Which of these regular shapes will tessellate on its own, fitting together with no gaps and no overlaps?

A. A regular pentagon

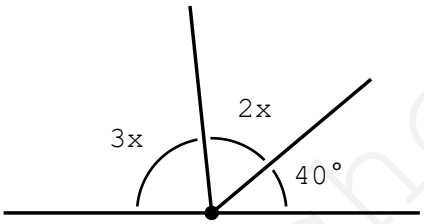
B. A regular hexagon

C. A regular heptagon

D. A regular octagon

E. A regular nonagon

Q8. Work out the value of x.



A. 20 *B.* 24 *C.* 28 *D.* 30 *E.* 36

Q9. How many diagonals can be drawn inside a pentagon?

A. 2 *B.* 4 *C.* 5 *D.* 8 *E.* 10

Q10. How many degrees does the hour hand of a clock turn through in 2 hours?

A. 30° *B.* 60° *C.* 90° *D.* 120° *E.* 180°

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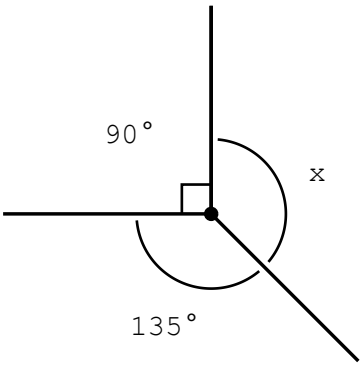
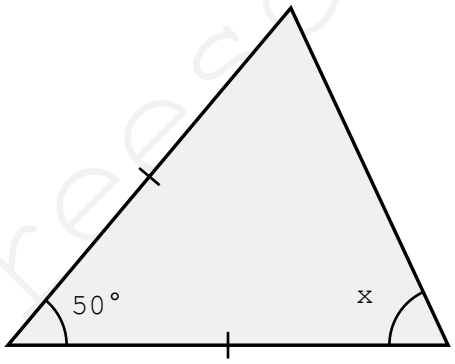
Q11. These three angles meet at a point. Work out the size of angle x.



A. 45° *B.* 90° *C.* 125° *D.* 135° *E.* 225°

Q12. The two dashed sides of this triangle are equal. Work out the size of angle x.



A. 50° *B.* 55° *C.* 60° *D.* 65° *E.* 130°

Q13. Which of these sets of angles could be the four angles of a quadrilateral?

A. 60°, 60°, 120°, 100°

B. 90°, 90°, 90°, 80°

C. 100°, 80°, 110°, 70°

D. 120°, 120°, 60°, 50°

E. 90°, 100°, 110°, 70°

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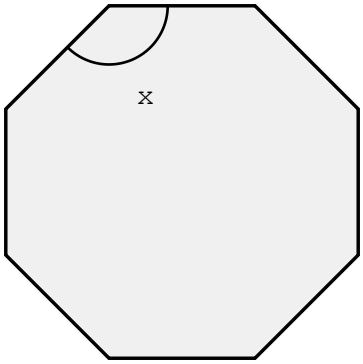
Q14. This is a regular octagon. Work out the size of angle x.



A. 45° *B.* 108° *C.* 120° *D.* 135° *E.* 144°

Q15. I am a quadrilateral. My diagonals cross at right angles, and I have exactly one line of symmetry. What am I?

A. A square

B. A rhombus

C. A rectangle

D. A parallelogram

E. A kite

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