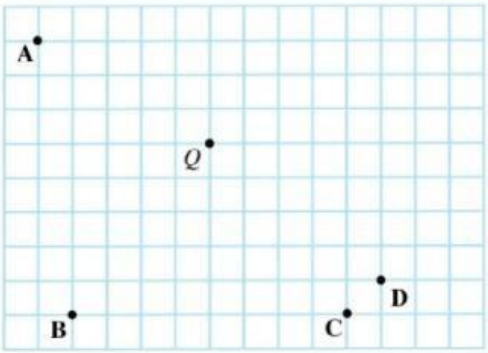
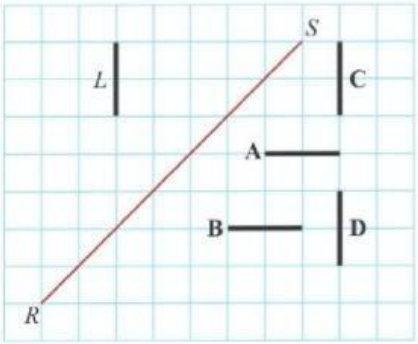
1. Which of the points is the image of point Q under the translation $\begin{pmatrix} 5 \\ -4 \end{pmatrix}$?

Antara titik berikut, yang manakah ialah imej bagi titik Q di bawah translasi $\begin{pmatrix} 5 \\ -4 \end{pmatrix}$?



- A
- B
- C
- D

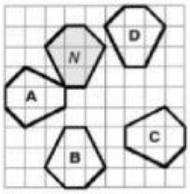
2. In the diagram, line L' is an image of line L under a reflection in the line RS.
Dalam rajah di bawah, garis L' ialah imej bagi L di bawah suatu pantulan pada paksi RS.



Which of the lines, **A**, **B**, **C** and **D**, is the line L'?
Antara garis **A**, **B**, **C** *dan* **D**, *yang manakah ialah L'?*

- A
- B
- C
- D

3. The diagram is drawn on a grid of squares.
Rajah di bawah dilukis pada grid segi empat sama.

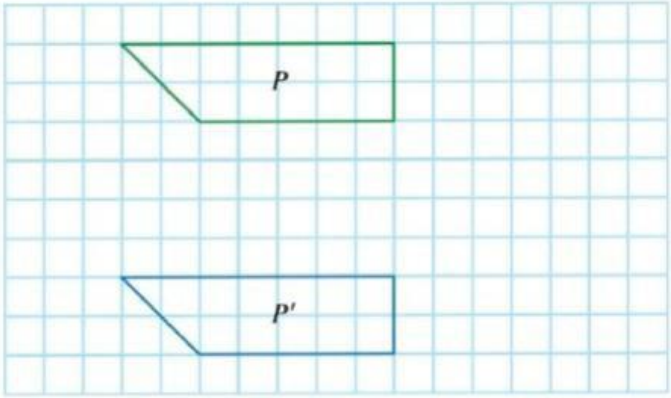


Which of the shapes, **A**, **B**, **C** or **D**, is **not** the image of the shape N under a rotation?
Antara bentuk **A**, **B**, **C**, *dan* **D**, *yang manakah* **bukan** *imej bagi bentuk N di bawah suatu putaran?*

- A
- B
- C
- D

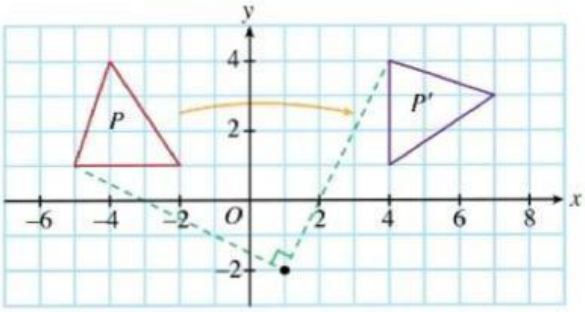
LIVEWORKSHEETS

4. The transformation shown in the diagram is
Penjelmaan yang ditunjukkan dalam rajah ialah



- A Reflection
  Pantulan
- B Translation
  Translasi
- C Rotation
  Putaran
- D Enlargement
  Pembesaran

5. In the diagram, P' is the image of P.
Dalam rajah di bawah, P' ialah imej bagi P.

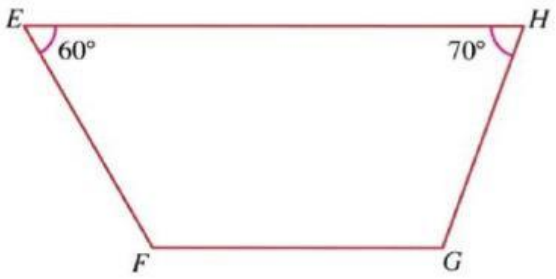


Which of the following describes the transformation correctly?
Antara berikut, yang manakah memperihalkan penjelmaan itu dengan betul?

- A Rotation of 90° anticlockwise about the point (1, −2)
  Putaran 90° lawan arah jam pada titik (1, −2)
- B Rotation of 90° anticlockwise about the point (−2, 1)
  Putaran 90° lawan arah jam pada titik (−2, 1)
- C Rotation of 90° clockwise about the point (1, −2)
  Putaran 90° ikut arah jam pada titik (1, −2)
- D Rotation of 90° clockwise about the point (−2, 1)
  Putaran 90° ikut arah jam pada titik (−2, 1)

LIVEWORKSHEETS

6. The diagram shows a trapezium *EFGH*.
Rajah di bawah menunjukkan sebuah trapezium EFGH.



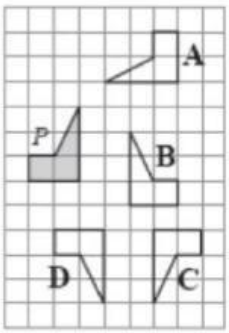
Another trapezium, *PQRS*, where $\angle P = 70°$ and $\angle Q = 60°$ is congruent to trapezium *EFGH*. Which of the following is possibly true?
Sebuah trapezium lain, PQRS, dengan $\angle P = 70°$ dan $\angle Q = 60°$ adalah kongruen dengan trapezium EFGH. Antara berikut, yang manakah mungkin benar?

- A $EF = QR$
- B $FG = PS$
- C $\angle R$ is a right angle.
  $\angle R$ ialah sudut tegak.
- D Trapeziums *EFGH* and *PQRS* have different shapes.
  Trapezium EFGH dan PQRS mempunyai bentuk yang berlainan.

7. The coordinates of the image of point $P(7, -4)$ under the translation $\begin{pmatrix} 6 \\ -5 \end{pmatrix}$ are
Koordinat bagi imej titik $P(7, -4)$ di bawah translasi $\begin{pmatrix} 6 \\ -5 \end{pmatrix}$ ialah

- A $(13, -9)$
- B $(13, 9)$
- C $(-9, 13)$
- D $(9, -13)$

8. The diagram is drawn on a grid of equal squares.
Rajah di bawah dilukis pada grid segi empat sama yang sama besar.

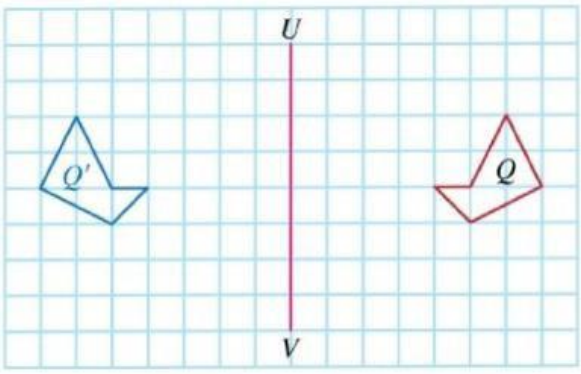


Which of the polygons **A**, **B**, **C** or **D**, is the image of *P* under a certain reflection?
Antara poligon **A**, **B**, **C** *dan* **D**, *yang manakah imej bagi P di bawah suatu pantulan?*

- A
- B
- C
- D

LIVEWORKSHEETS

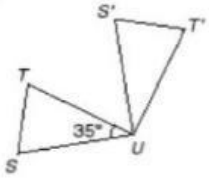
9. In the diagram, Q' is the image of Q.
Dalam rajah di bawah, Q' ialah imej bagi Q.



Which of the following describes the transformation correctly?
Antara berikut, yang manakah memperihalkan penjelmaan itu dengan betul?

- **A** Translation $\begin{pmatrix} -6 \\ 3 \end{pmatrix}$
  Translasi $\begin{pmatrix} -6 \\ 3 \end{pmatrix}$
- **B** Translation $\begin{pmatrix} -3 \\ 6 \end{pmatrix}$
  Translasi $\begin{pmatrix} -3 \\ 6 \end{pmatrix}$
- **C** Reflection in the line UV
  Pantulan pada garis UV
- **D** Reflection in the x-axis
  Pantulan pada paksi-x

10. In the diagram, STU is rotated to $S'T'U$ under a clockwise rotation of 90° about the point U.
Dalam rajah di bawah, STU diputarkan menjadi $S'T'U$ di bawah satu putaran 90° ikut jam pada titik U.



What is the value of the angle SUT' ?
Apakah nilai sudut SUT' ?

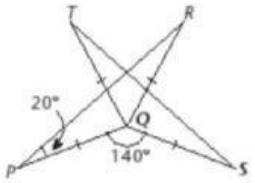
- **A** 35°
- **B** 90°
- **C** 125°
- **D** 170°

11. Point $H(2, -1)$ is reflected in the x-axis. The coordinates of the image of H are
Titik $H(2, -1)$ dipantulkan pada paksi-x. Koordinat imej bagi H ialah

- **A** $(2, 1)$
- **B** $(-2, 1)$
- **C** $(-2, -1)$
- **D** $(-1, 2)$

LIVEWORKSHEETS

12. In the diagram, *PQR* and *SQT* are two congruent isosceles triangles.
Dalam rajah di bawah, PQR dan SQT ialah dua buah segi tiga sama kaki yang kongruen



Calculate ∠*TQR*.
Hitung ∠TQR.

- A 90°
- B 85°
- C 82°
- D 60°

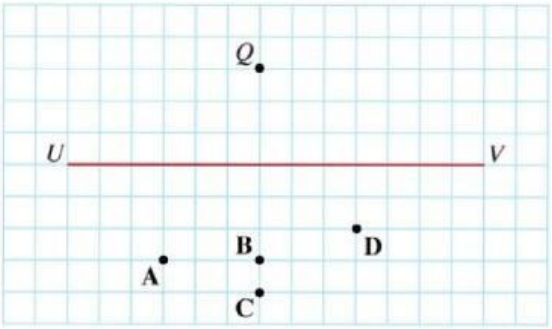
13. What is the order of rotational symmetry of the shape?
Apakah peringkat simetri putaran bagi bentuk itu?

- A 2
- B 3
- C 4
- D 5

14. The point *S* is rotated 180° clockwise about the origin. If *S* is (3, 0), find the coordinates of its image.
Titik S diputarkan 180° ikut arah jam pada asalan. Jika S ialah (3, 0), cari koordinat imejnya.

- A (0, −3)
- B (0, 3)
- C (−3, 0)
- D (3, 3)

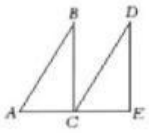
15. Which of the following is the image of point *Q* under the reflection in the line *UV*?
Antara berikut, yang manakah ialah imej bagi titik Q di bawah pantulan pada garis UV?



- A
- B
- C
- D

LIVEWORKSHEETS

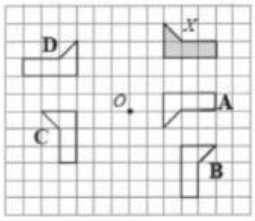
16. In the diagram, ΔCDE is the image of ΔABC under an isometric transformation.
Dalam rajah di bawah, ΔCDE ialah imej bagi ΔABC di bawah suatu penjelmaan isometri



The transformation is
Penjelmaan itu ialah

- ◯ **A** a reflection.
  suatu pantulan.
- ◯ **B** a rotation.
  suatu putaran.
- ◯ **C** a translation.
  suatu translasi.
- ◯ **D** an enlargement.
  suatu pembesaran.

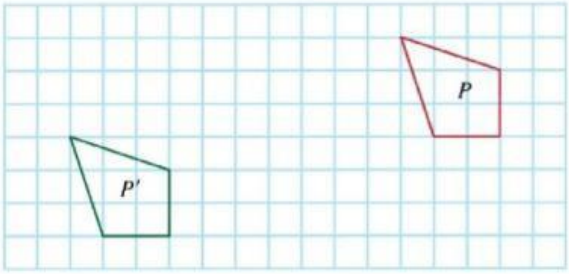
17. The diagram is drawn on a grid of equal squares.
Rajah di bawah dilukis pada grid segi empat sama yang sama besar.



Which of the polygons **A**, **B**, **C** and **D** is the image of *X* under a certain rotation about the point *O*?
Antara poligon **A**, **B**, **C** *dan* **D**, *yang manakah imej bagi X di bawah suatu putaran tertentu pada titik O?*

- ◯ **A**
- ◯ **B**
- ◯ **C**
- ◯ **D**

18. *P'* is the image of *P* under a translation.
P' ialah imej bagi P di bawah suatu translasi.



State the translation.
Nyatakan translasi itu.

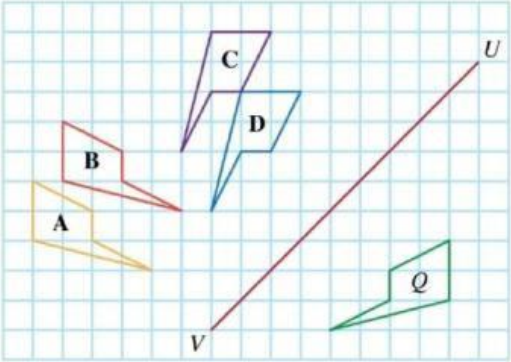
- ◯ **A** $\begin{pmatrix} -4 \\ 3 \end{pmatrix}$
- ◯ **B** $\begin{pmatrix} -10 \\ -3 \end{pmatrix}$
- ◯ **C** $\begin{pmatrix} 10 \\ -3 \end{pmatrix}$
- ◯ **D** $\begin{pmatrix} 4 \\ -3 \end{pmatrix}$

LIVEWORKSHEETS

19. What is the order of rotational symmetry of the shape?
Apakah peringkat simetri putaran bagi bentuk itu?

- A 2
- B 3
- C 4
- D 5

20. Which of the following is the image of object *Q* under the reflection in the line *UV*?
Antara berikut, yang manakah ialah imej bagi objek Q di bawah pantulan pada garis UV?



- A
- B
- C
- D

LIVEWORKSHEETS