

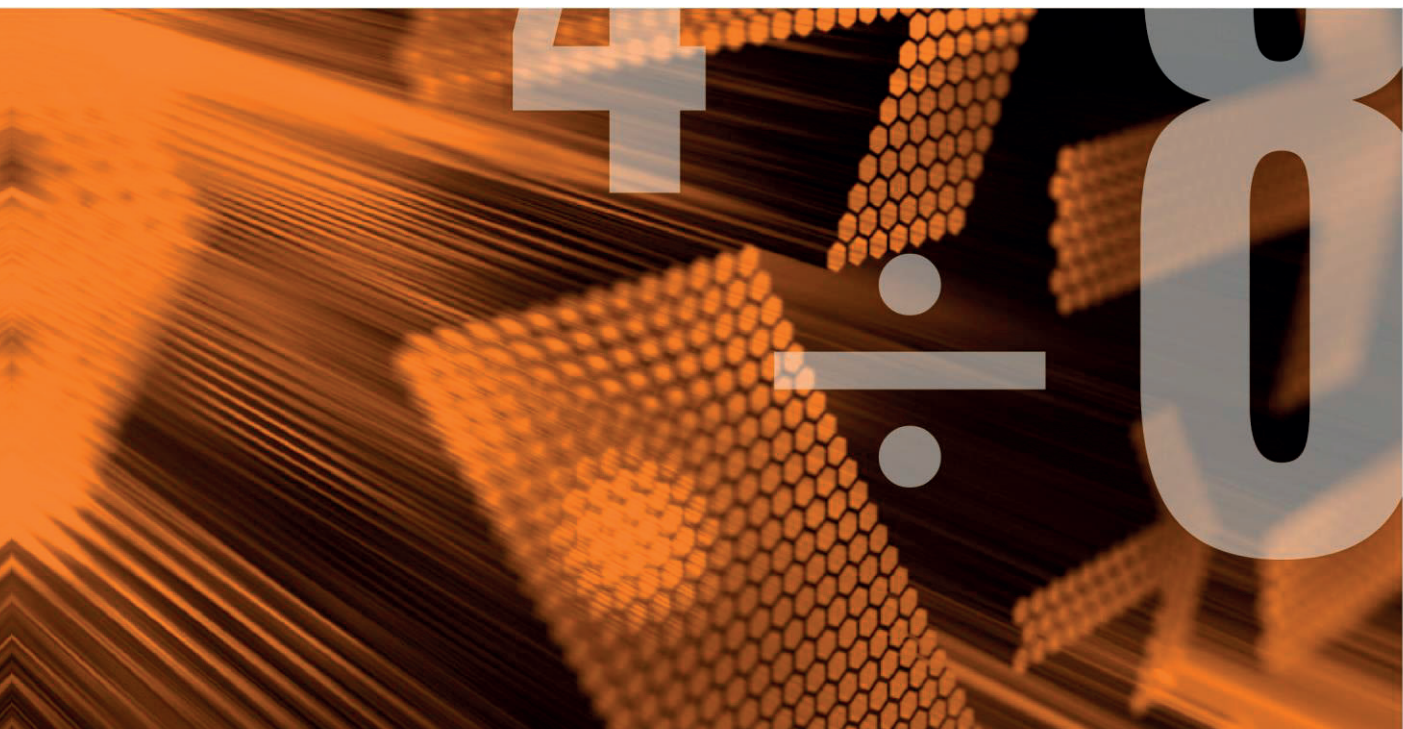
Junior
Certificate
School
Programme



Sum Zone

Symmetry and Translations

Student Workbook



An Roinn Oideachais
agus Scileanna
Department of
Education and Skills

PDST
Professional Development
Service for Teachers | An tSeirbhís um Fhorbairt
Ghairmiúil do Mhúinteoirí



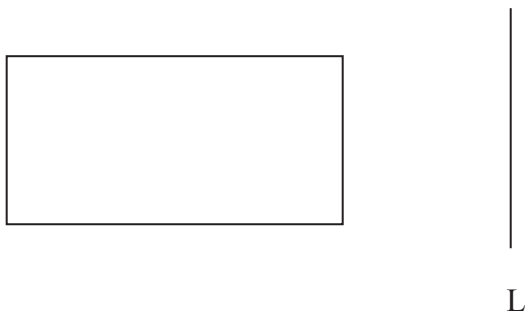
Junior
Certificate
School
Programme

Contents

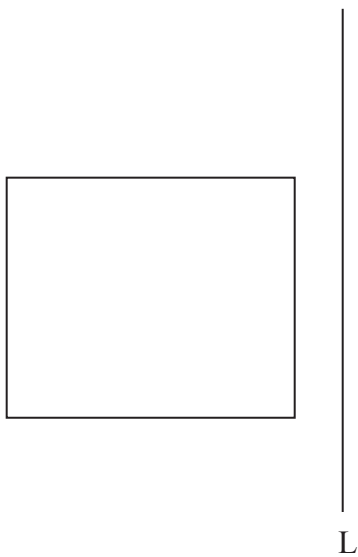
Chapter 1	Axial Symmetry	Page 3
Chapter 2	Central Symmetry	Page 15
Chapter 3	Translations	Page 22

Chapter 1
Axial Symmetry

1. Draw the image of this rectangle under Axial Symmetry in the line L



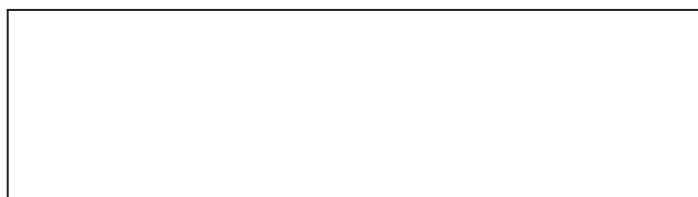
2. Find the image of this rectangle under Axial Symmetry in the line L



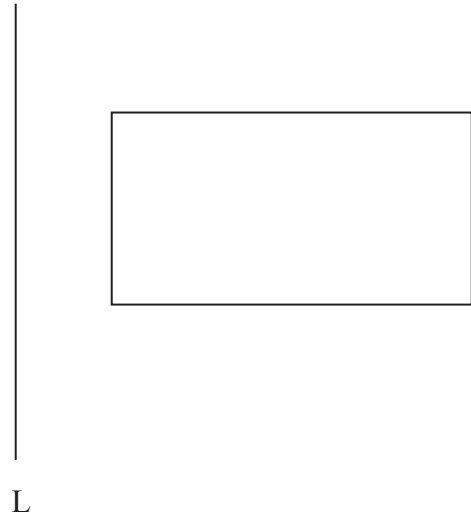
3. Draw the image of this rectangle under Axial Symmetry in the line L



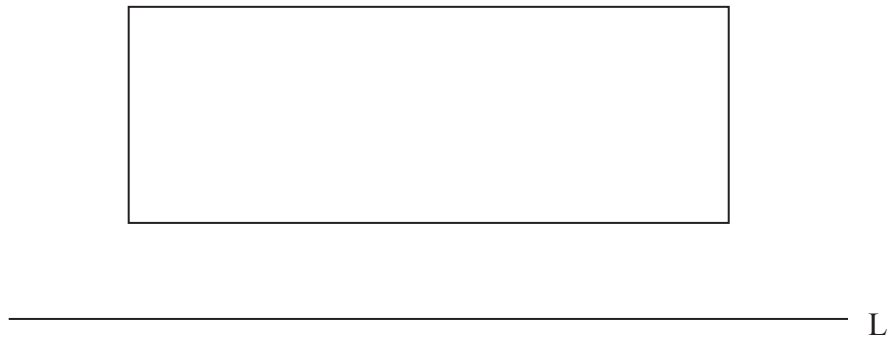
4. Find the image of this rectangle under Axial Symmetry in the line L



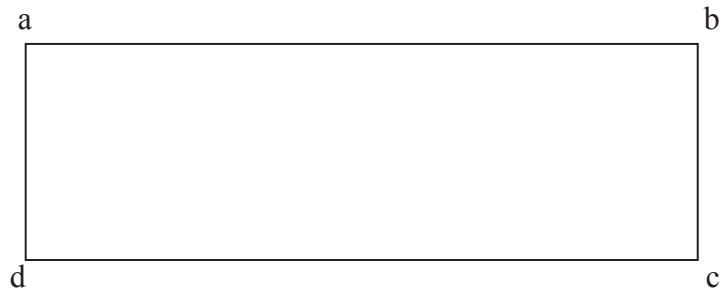
5. Draw the image of this rectangle under Axial Symmetry in the line L



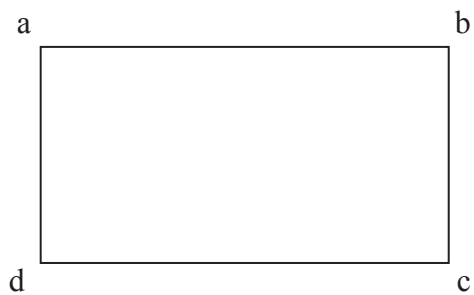
6. Find the image of this rectangle under Axial Symmetry in the line L



7. Draw the image of the rectangle $abcd$ under Axial Symmetry in the line dc



8. Find the image of the rectangle $abcd$ under Axial Symmetry in the line bc



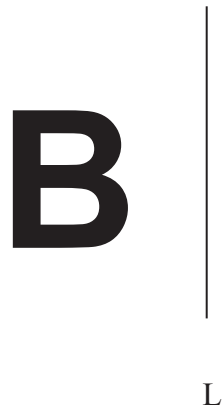
9. Draw the image of the rectangle $abcd$ under Axial Symmetry in the line ad



10. Find the image of the rectangle $abcd$ under Axial Symmetry in the line ab



11. Draw the image of the object under Axial Symmetry in the line L



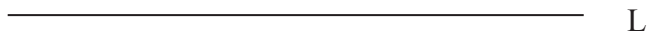
12. Find the image of the object under Axial Symmetry in the line L



13. Draw the image of the object under Axial Symmetry in the line L



14. Find the image of the object under Axial Symmetry in the line L

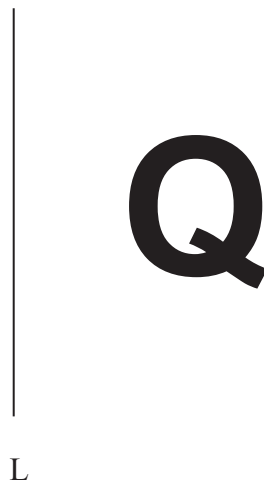


Y

15, Draw the image of the object under Axial Symmetry in the line L



16. Find the image of the object under Axial Symmetry in the line L



17. Draw the image of the object under Axial Symmetry in the line L

5



L

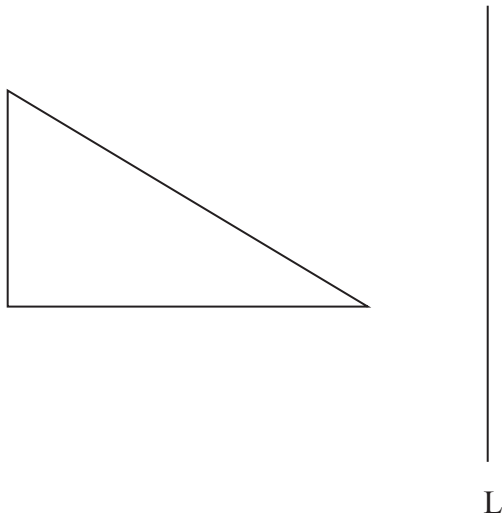
18. Find the image of the object under Axial Symmetry in the line L

7

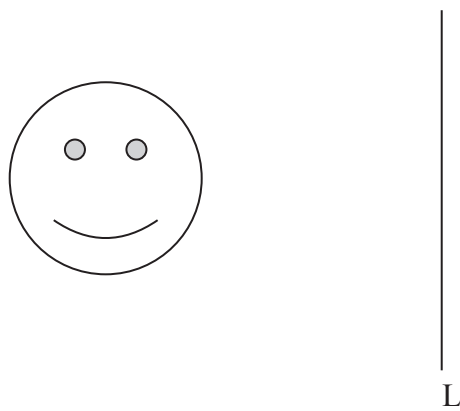


L

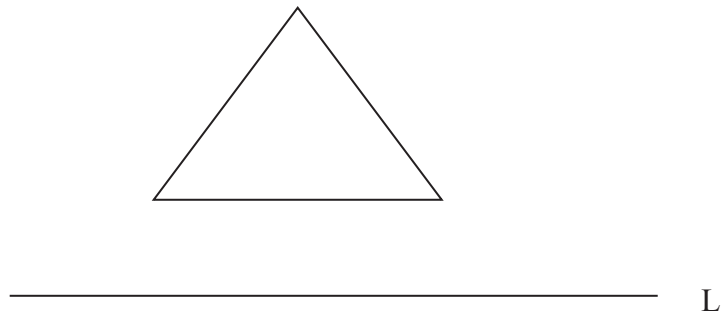
19. Draw the image of the object under Axial Symmetry in the line L



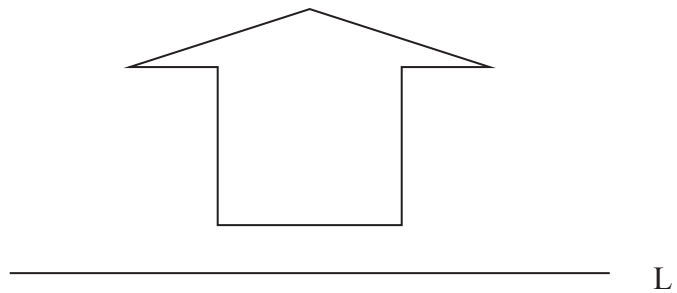
20. Find the image of the object under Axial Symmetry in the line L



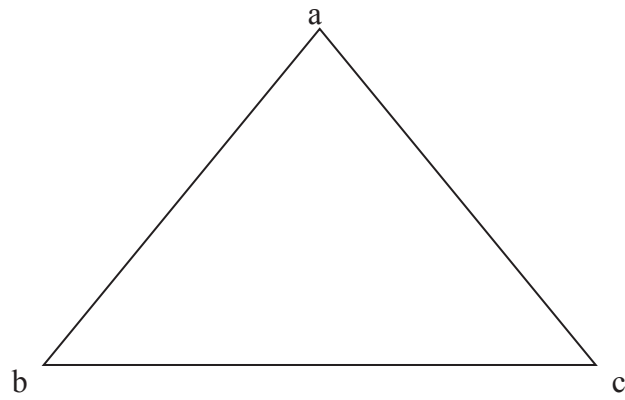
21. Draw the image of the object under Axial Symmetry in the line L



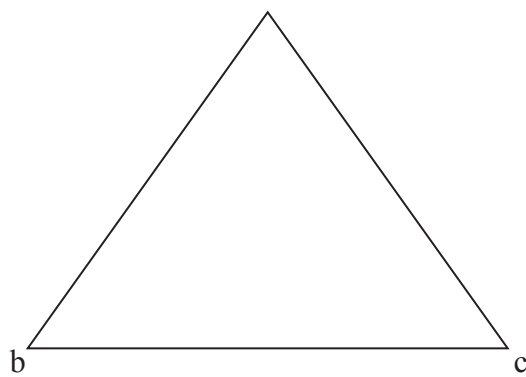
22. Find the image of the object under Axial Symmetry in the line L



23. Draw the image of the triangle abc under Axial Symmetry in the line bc



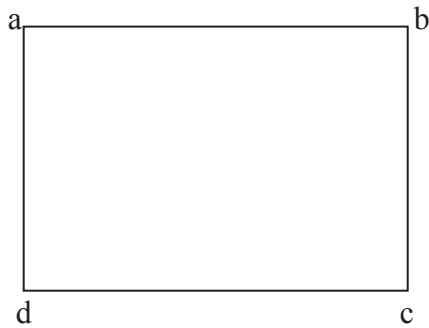
24. Find the image of the triangle abc under Axial Symmetry in the line ab



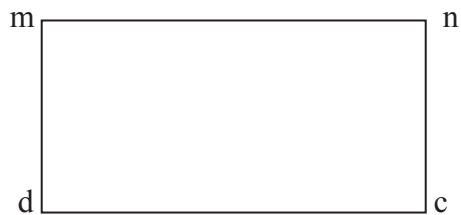
Chapter 2

Central Symmetry

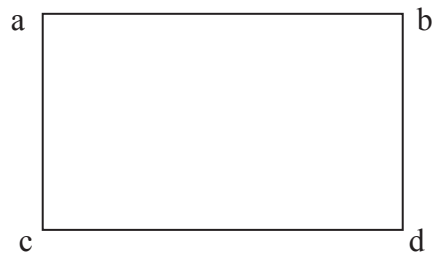
1. Draw the image of the rectangle $abcd$ under Central Symmetry in the point c



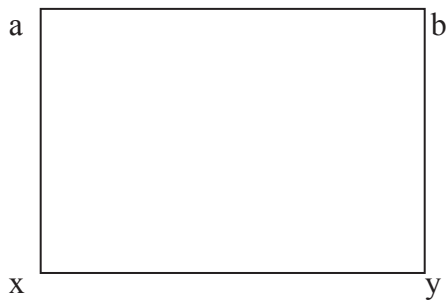
2. Find the image of the rectangle $mncd$ under Central Symmetry in the point d



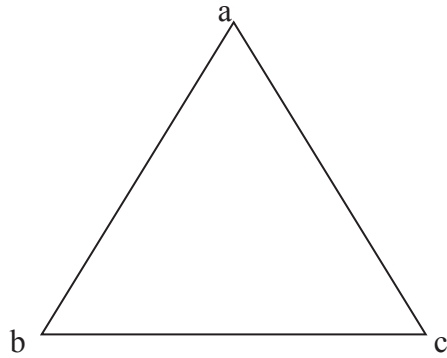
3. Draw the image of the rectangle $abcd$ under Central Symmetry in the point a



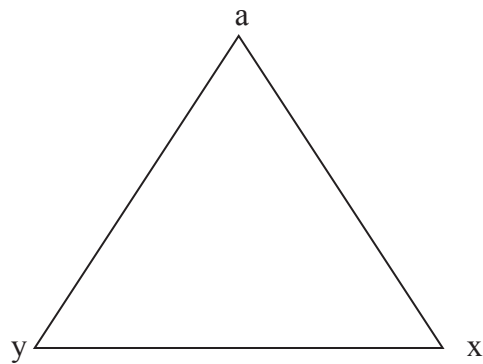
4. Find the image of the rectangle $abyx$ under Central Symmetry in the point b



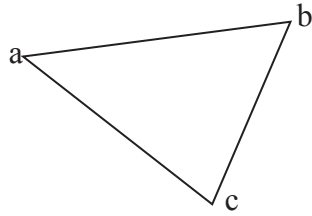
5. Draw the image of the triangle acb under Central Symmetry in the point c



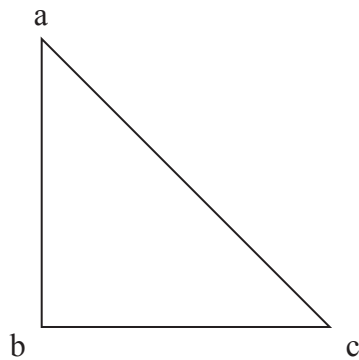
6. Find the image of the triangle axy under Central Symmetry in the point a



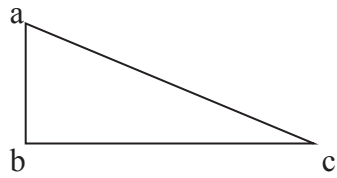
7. Draw the image of the triangle abc under Central Symmetry in the point c



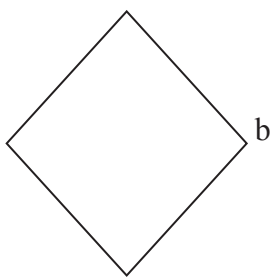
8. Find the image of the triangle acb under Central Symmetry in the point c



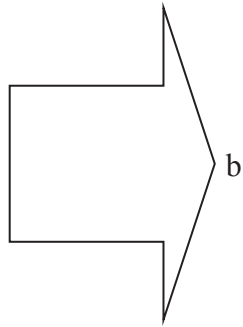
9. Draw the image of the triangle acb under Central Symmetry in the point b



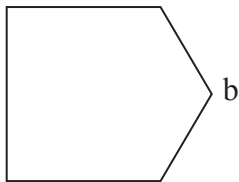
10. Find the image of this diamond under Central Symmetry in the point b



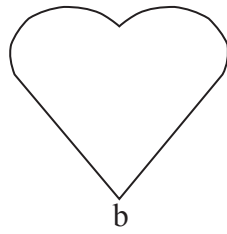
11. Draw the image of this arrow under Central Symmetry in the point b



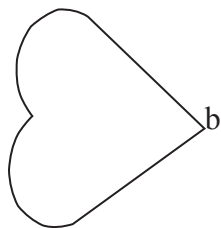
12. Find the image of this arrow under Central Symmetry in the point b



13. Find the image of this heart under Central Symmetry in the point b



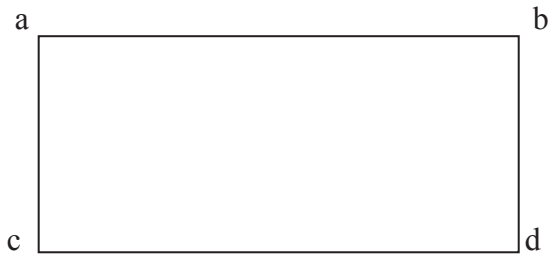
14. Draw the image of this heart under Central Symmetry in the point b



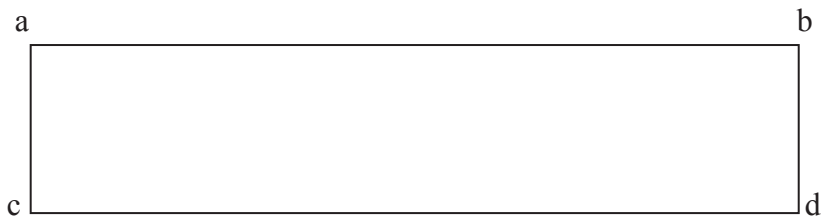
Chapter 3

Translations

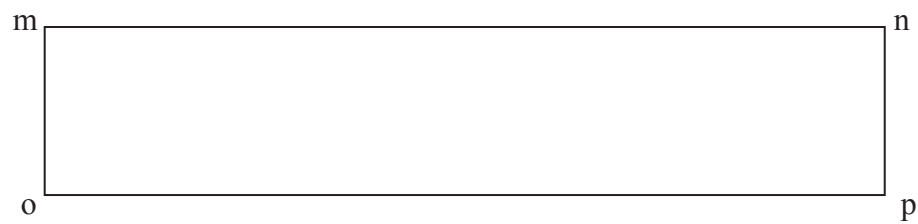
1. Draw the image of this rectangle under the translation \rightarrow ab



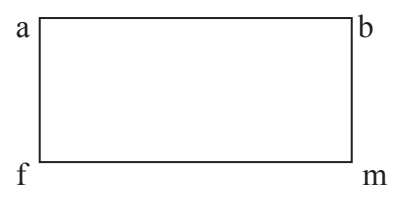
2. Draw the image of this rectangle under the translation \rightarrow bd



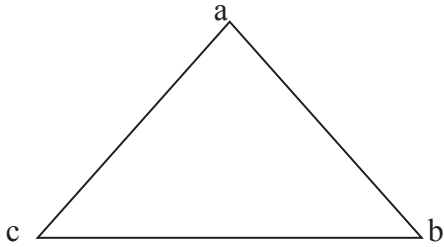
3. Draw the image of this rectangle under the translation \vec{pn}



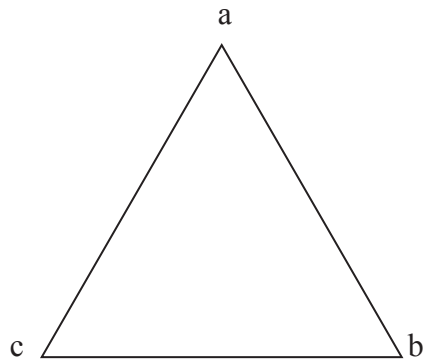
4. Draw the image of this rectangle under the translation \vec{mf}



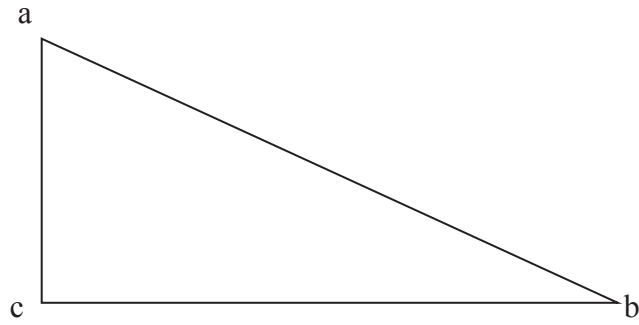
5. Draw the image of the triangle abc under the translation \vec{cb}



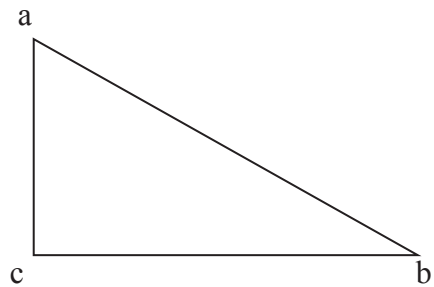
6. Draw the image of the triangle abc under the translation \vec{bc}



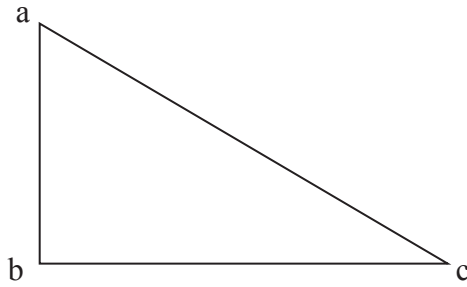
7. Draw the image of the triangle abc under the translation \vec{ac}



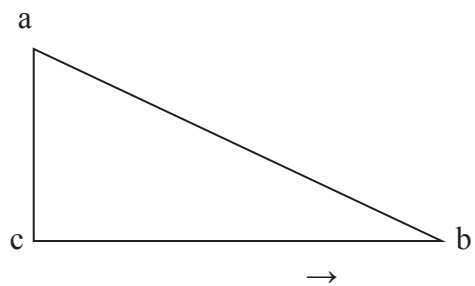
8. Draw the image of the triangle abc under the translation \vec{bc}



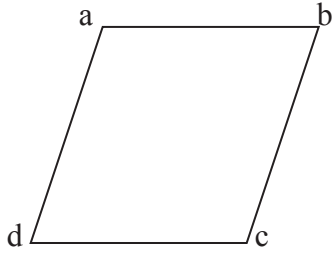
9. Draw the image of the triangle acb under the translation \vec{ac}



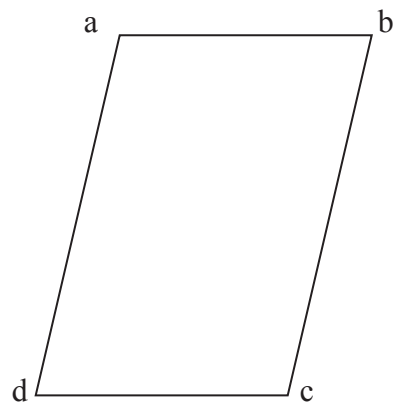
10. Draw the image of the triangle abc under the translation \vec{ba}



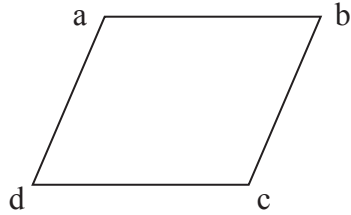
11. Draw the image of the parallelogram $abcd$ under the translation \vec{ab}



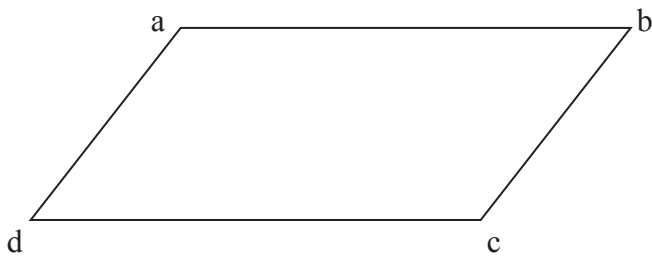
12. Draw the image of the parallelogram $abcd$ under the translation \vec{cd}



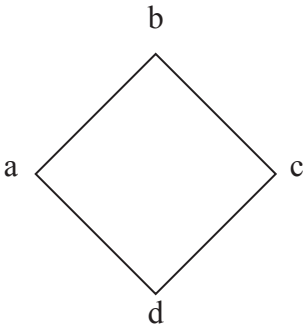
13. Draw the image of the parallelogram $abcd$ under the translation \vec{bc}



14. Draw the image of the parallelogram $abcd$ under the translation \vec{da}



15. Draw the image of the diamond $abcd$ under the translation \vec{ad}



16. Draw the image of the diamond $abcd$ under the translation \vec{ab}

