1. Evaluate and simplify the following.

   a. $(-3)^4$

   b. $\sqrt{144}$

   c. $6x^3 \times 4x^2$

   d. Expand and simplify: $3x(2x-5)-4(x^2+2x)$

   e. Factorise completely: $30x^2y+45xy+20x+30$

2. Solve the following.

   a. $\frac{3}{4}(2x-5)-\frac{1}{2}=\frac{2}{3}(x+6)-\frac{7}{6}$

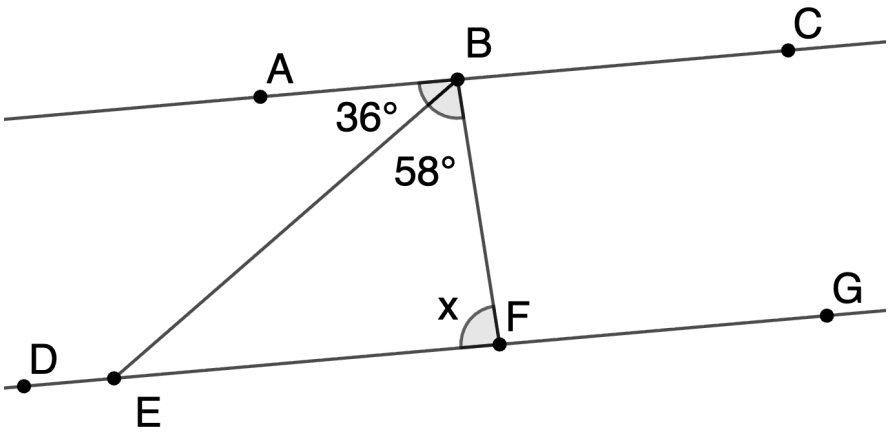
   b. $4(2x-3)-5>3(x+1)-27$

   c. Find the values of x and y which satisfy the simultaneous equations.

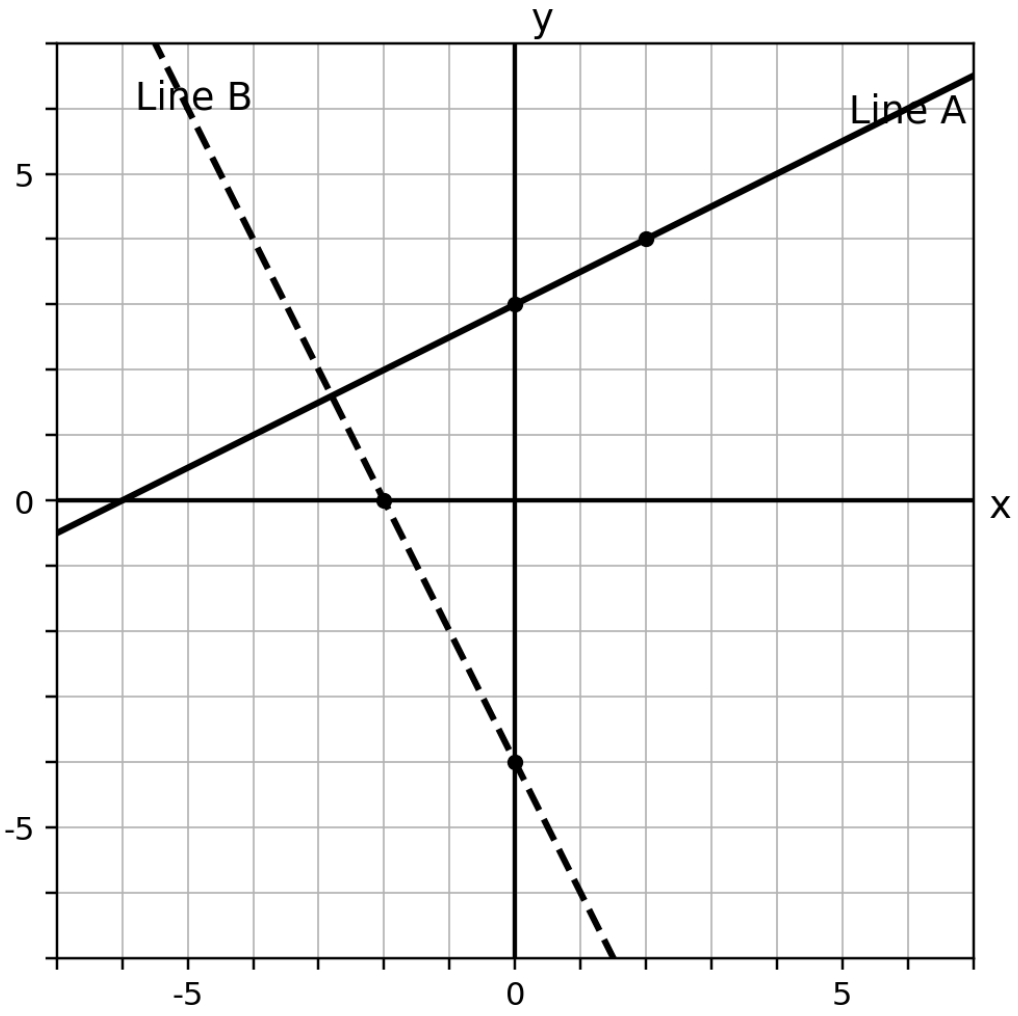
$$3x+2y=16$$

$$5x-y=13$$

4. In the given figure, (AB) is parallel to (DG). Find the value of (x).



4. The graph shows Line A and Line B on a coordinate plane.



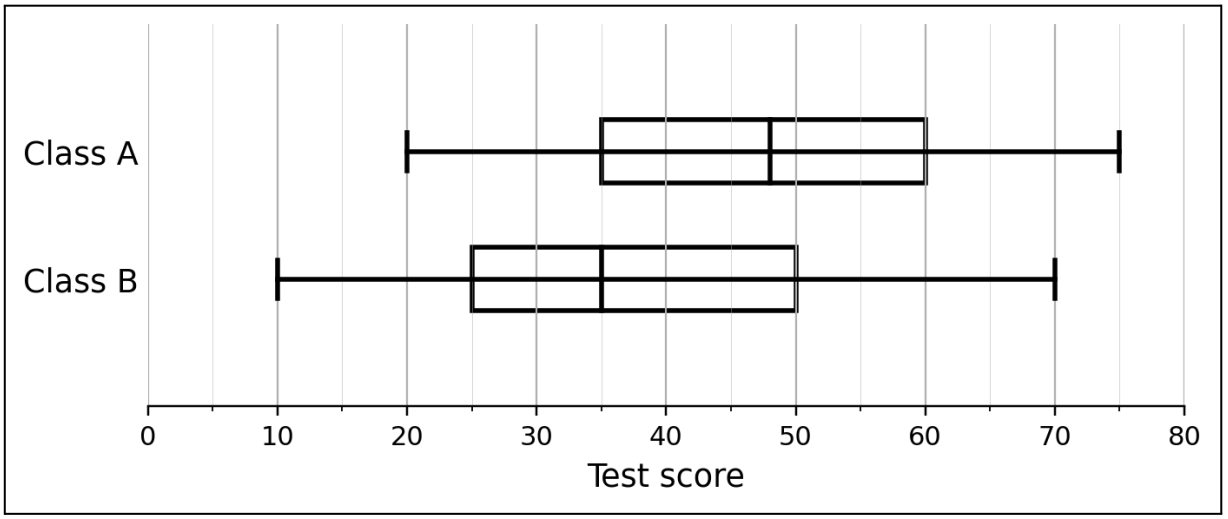
a. Determine the gradient of Line A.

b. Determine the y-intercept of Line A.

c. Write the equation of Line A in the form $y = mx + c$.

d. Line C is parallel to Line B and passes through the point $(0, 3)$. Write the equation of Line C.

5. The box-and-whisker diagrams show the test scores of two classes.



a. Which class has the higher median score? Write down the median.

b. Which class has the larger interquartile range? Calculate the IQR.

c. Which class has the more consistent test scores? Give a reason.

d. Classify each type of data as discrete or continuous. Circle your answer.

Number of students absent: discrete / continuous

Time taken to finish the test: discrete / continuous