1. Eva and Freya share £56 in the ratio 4 : 3 Work out how much each person gets

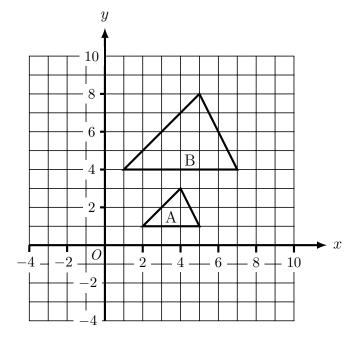
Eva  $\mathcal{L}$  .....

Freya  $\mathcal{L}$  .....

2. Seb and Tia share some money in the ratio 4:1 Seb gets £40

Work out how much Tia should have.

3. Describe fully the transformation that maps shape A onto shape B.



4.



On the grid, draw an enlargement of the shaded shape with a scale factor 3.

5. (a) Write 0.00047 in standard form

(a) .....

6. Write these numbers in order of size. Start with the smallest number.

0.034

 $34 \times 10^1$ 

 $0.34 \times 10^{4}$ 

 $3400 \times 10^{-2}$ 

.....

7. (a) Write  $48 \times 10^{-3}$  in standard form

(a) .....

8. (a) Calculate  $8 \times 10^5 \times 5 \times 10^{-3}$ 

Give your answer in standard form.

(a) .....

9. Expand 5(y-2)

9. .....

10. Expand p(p-1)

10. .....

11. Expand and simplify (p+3)(p-5)

11. .....

12. Expand and simplify (x-1)(x-3)

12. .....

13. Factorise 2m - 10

13. .....

14. Factorise  $3y + y^2$ 

14. .....

15. Factorise  $9x^2 + 6xy$ 

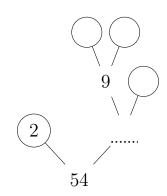
15. .....

16. Factorise  $x^2 - 16$ 

16. .....

Stuck? try these first

17. (i) Complete this prime factor tree.

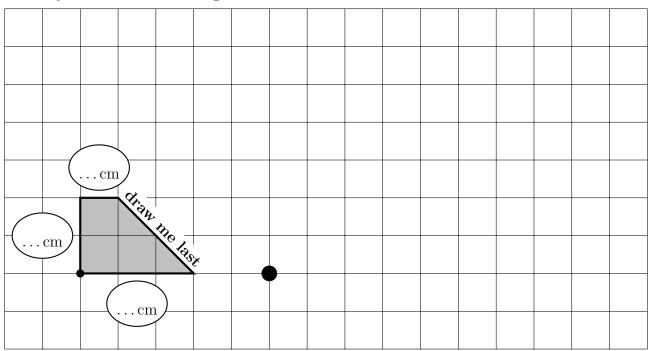


(ii) Write 54 as a product of its prime factors.

17.													
T1.	٠	•	•	•	•	•	•	•	•	•	•	•	•

18. Draw an enlargement of the shaded shape with a scale factor of 3

You may use the formula:  $edge \times scale factor = EDGE$ 



19. (a) Write  $2.3 \times 10^5$  as an ordinary number

(a)							
\ /							

20. (a) Write  $4.7 \times 10^{-4}$  as an ordinary number

21.

				-	
T					

Draw an enlargement of shape T scale factor 3.

22. (a) Write  $3\,500$  in standard form

(a) .....

23. (a) Simplify y + y + y + y

(a) .....

24. (a) Simplify x + 6x + x

(a) .....

25. (a) Simplify -6x + x

(a) .....

26. (a) Simplify 3e - 2f + 2e - 3f

(a) .....

27. (a) Simplify  $2 \times w \times 5$ 

(a) .....

28. (a) Simplify  $2u \times t$ 

(a) .....

29. (a) Simplify  $2w \times 5w$ 

(a) .....