

End of Year Revision Pack 2

1) Evaluate

a) $4383 \div 9$

b) $50 \div 0.02$

c) $0.024 \div 0.6$

d) $21768 \div 24$

e) $14084 \div 7$

f) $18 \div 0.36$

2) 6 crumpets cost £1.50, find the cost of 17 crumpets.

3) Evaluate

a) $\frac{2}{3} \div \frac{7}{9}$

b) $5 \div \frac{1}{3}$

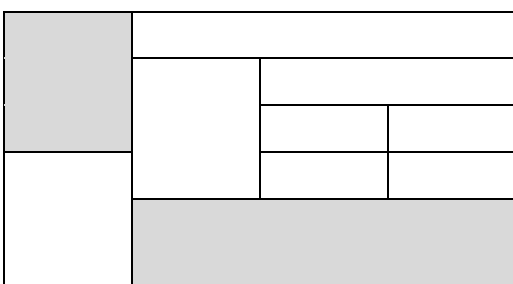
c) $6\frac{2}{3} \div \frac{5}{6}$

4) Write down the first five terms of the sequence defined by n^{th} term = $5n - 2$

5) Convert the following fractions, decimals and percentages:

	Fraction	Decimal	Percentage
a)	$\frac{11}{25}$		
b)		0.7	
c)			62%
d)			0.4%
e)		4.05	
f)	$\frac{3}{400}$		

6) What fraction of the shape below is shaded



7) Place a $<$, $>$ or $=$ sign between these numbers to make a correct statement.

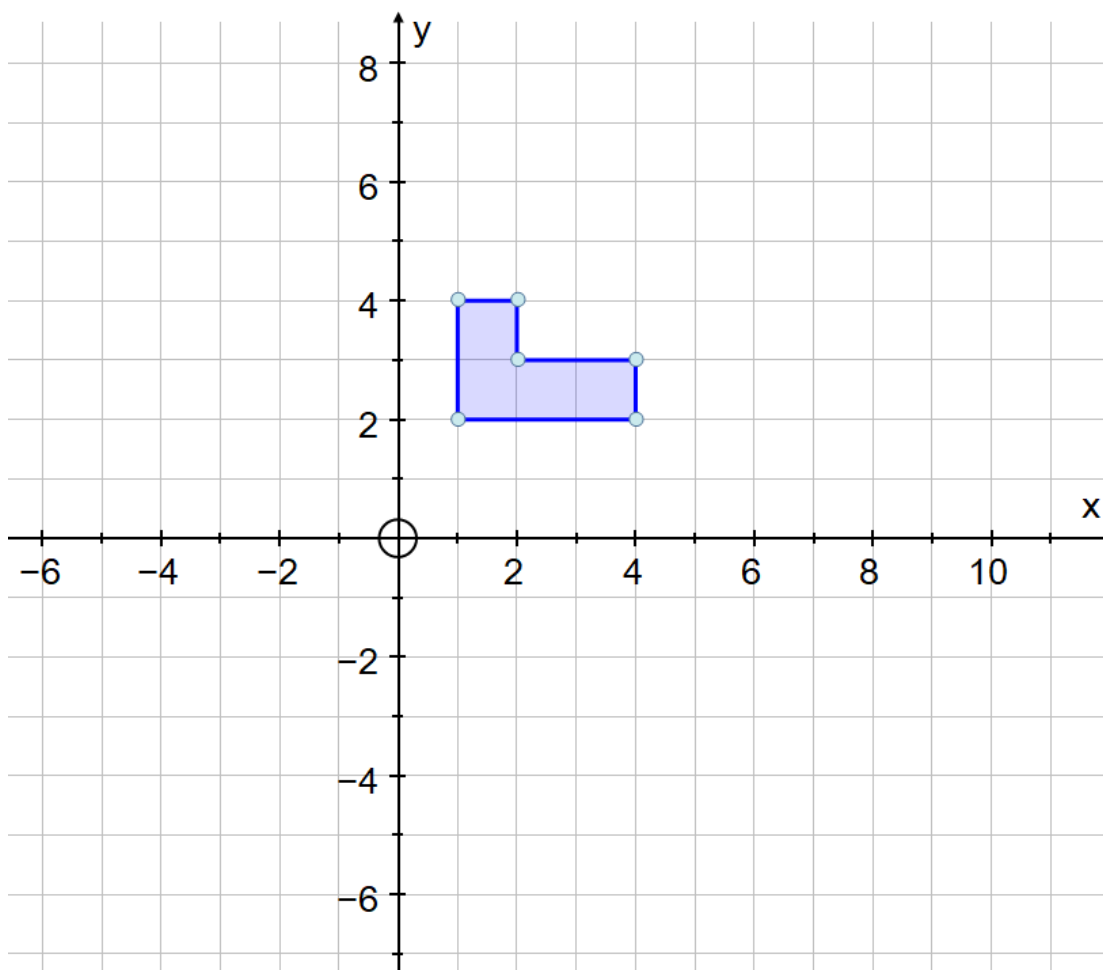
a) $-2 \dots -5$ b) $0.204 \dots 0.23$ c) $\frac{3}{20} \dots 0.15$

8) Find 28% of 105

9) Find $\frac{5}{6}$ of 3

10) A 6 litre tin of paint is made using 1.2 litres of binder.
What percentage of the paint is binder?

11) Shape A is given below



- a) Reflect shape A in the line $x = 5$
- b) Reflect shape A in the line $y = x + 4$
- c) Translate A by $\begin{pmatrix} 3 \\ -5 \end{pmatrix}$
- d) Translate A by $\begin{pmatrix} -3 \\ 0 \end{pmatrix}$, find the equation of the line to reflect this new shape into so that the image is the same as part a)

12) Find a term-to-term rule to describe the following sequences:

- a) 5, 9, 13, 17, 21, b) 9, 6, 4, $\frac{8}{3}$, ... c) 3, 4, 12, 48, 576, ...

13) If the following statements are incorrect, insert brackets to correct them:

- a) $3 + 2 \times 7 = 35$ b) $6 + 9 \div 3 + 2 = 11$ c) $4 \times 5 - 2^2 = 36$

14) A sequence starts: 7, 5, ..

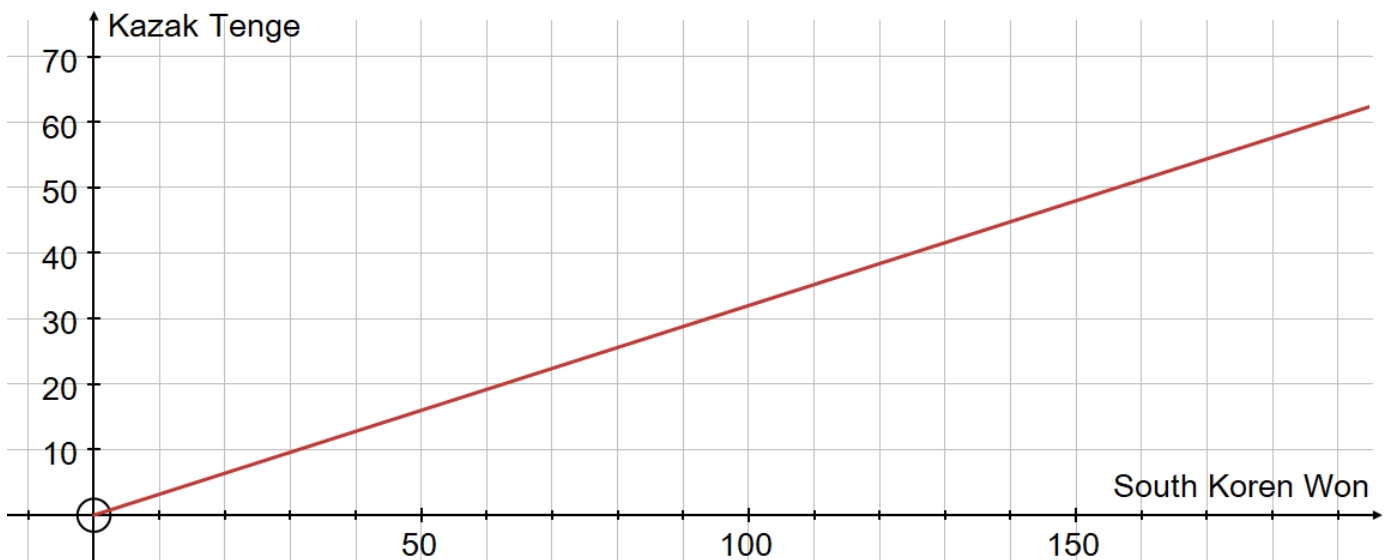
The term to term rule is: Find the difference between the last two terms

Find the 100th term

15) Evaluate, giving your answer as a mixed number if necessary.

- a) $5\frac{1}{3} \times \frac{7}{8}$ b) $4 \times 6\frac{1}{2}$ c) $6\frac{1}{3} - \frac{5}{6} \times 1\frac{1}{2}$

16) The graph below allows you to convert Korean Won to Kazak Tenge



Use the graph to approximate its value in the other currency:

- a) 50 Won b) 40 Tenge c) 15,000 Won

17) Evaluate

- a) $-12 \div 3$ b) $-42 \div -7$ c) $4 \div -\frac{1}{8}$ d) $-\frac{3}{4} \div 2$

18) Concrete is made from a mixture of:

3kg water

2kg sand

0.4kg cement

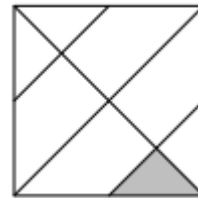
1kg gravel

I wish to make 8kg of concrete, how much of each do I need?

Challenge Section:

19) What is the value of $1 - (2 - (3 - 4 - (5 - 6)))$?

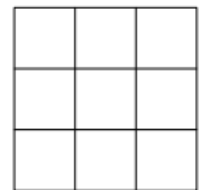
20) What fraction of the square is shaded?



21) What is 0.015% of 60 million?

22) Jill was given a large jar of jam. She gave one sixth of the jam to Jan. Jill then gave one thirteenth of the remaining jam to Jas. Jill was left with 1 kg of jam. What was the weight, in kg, of the jam in Jill's jar at the start?

23) To draw a 3 by 3 square grid you need 8 straight lines, as shown. How many straight lines do you need to draw a n by n square grid?



24) Which of the following has the same value as $10\,006 - 8008$?

10 007 - 8007 100 060 - 80 080 10 000 - 8002 106 - 88 5003 - 4004

25) Goeff thinks of a number.

35% of his number is $\frac{14}{25}$.

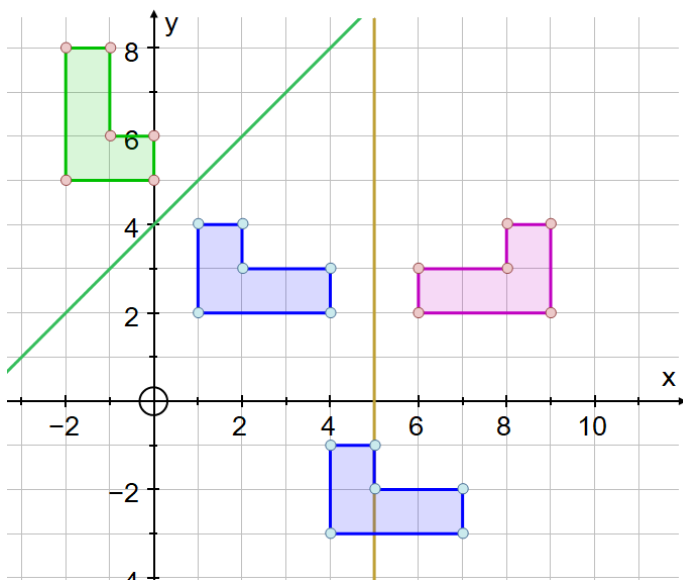
Find $\frac{7}{8}$ of his number.

Answers 1a) 487 b) 2500 c) 0.04 d) 907 e) 2012 f) 50 2) £4.25 3a) $\frac{6}{7}$ b) 15 c) 8

4) 3, 8, 13, 18, 23 5a) 0.44, 44% b) $\frac{7}{10}$, 70% c) $\frac{31}{50}$, 0.62 d) $\frac{1}{250}$, 0.004 e) $4\frac{1}{20}$, 405%

f) 0.0075, 0.75% 6) $\frac{3}{8}$ 7a) > b) < c) = 8) 29.4 9) 2.5 10) 20% 11) below d) $x = 3.5$

12a) add 4 b) multiply by $\frac{2}{3}$ c) multiply previous 2 terms 13a) $(3 + 2) \times 7 = 35$



b) correct c) $4 \times (5 - 2)^2 = 36$ 14) 1
 15a) $4\frac{2}{3}$ b) 26 c) $5\frac{1}{12}$ 16a) ~16 b) ~125
 c) ~4800 17) -4 b) 6 c) -32 d) $-\frac{3}{8}$ 19) -1
 20) $\frac{1}{16}$ 21) 9000 22) 1.3kg 23) $2n+2$
 24) 10000-8002 25) 1.4 or $\frac{7}{5}$