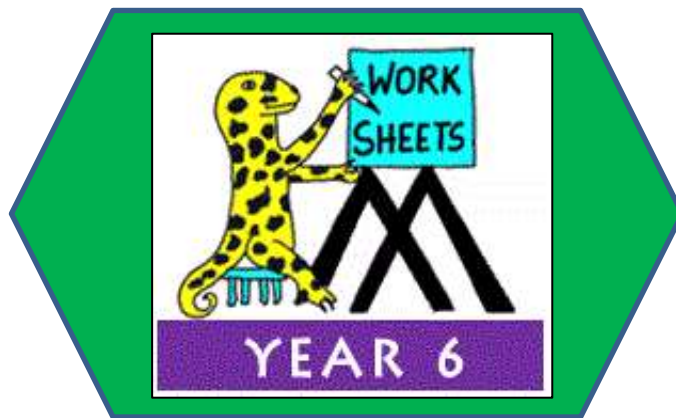
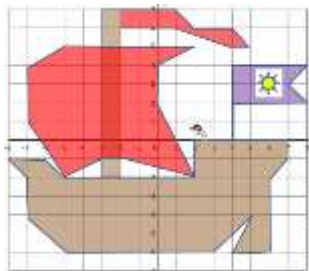


MATH SALAMANDERS

YEAR 6 MATHS GRAB PACK 3

This pack is a selection of 10 Maths sheets and one game adapted for Year 6 pupils. All the worksheets are also available on our site.



In the pack is a range of number sheets, colouring pages, and puzzles.

There is also an answer pack which you can download separately.

CONTENTS			
1	Big Number Column Addition Sheet 1	7	Decimals to Percents and Fractions 1
2	Birthday Bonanza	8	Magic Square Worksheet 4.3
3	Tyger's Money Square Challenge 4:3	9	Plot the Co-ordinates 1
4	Decimal Column Subtraction 3	10	Mental Maths Quiz 6:3
5	Castle Line Symmetry	11	Fraction-Decimal Game
6	Place Value Riddles 5A		

Please give us feedback on our pack – both what you liked and what sheets you would like to see more of by leaving a comment on the link below.

<https://www.math-salamanders.com/math-grab-packs.html>



BIG NUMBER COLUMN ADDITION SHEET 1

$$\begin{array}{r} 1) \quad 6045173 \\ + \quad 2146185 \\ \hline \end{array}$$

$$\begin{array}{r} 2) \quad 1274538 \\ + \quad 6382714 \\ \hline \end{array}$$

$$\begin{array}{r} 3) \quad 3748295 \\ + \quad 2087537 \\ \hline \end{array}$$

$$\begin{array}{r} 4) \quad 7532961 \\ + \quad 673829 \\ \hline \end{array}$$

$$\begin{array}{r} 5) \quad 9024382 \\ + \quad 5839207 \\ \hline \end{array}$$

$$\begin{array}{r} 6) \quad 6473291 \\ + \quad 8372918 \\ \hline \end{array}$$

$$\begin{array}{r} 7) \quad 7384735 \\ + \quad 8372613 \\ \hline \end{array}$$

$$\begin{array}{r} 8) \quad 4038291 \\ + \quad 637282 \\ \hline \end{array}$$

$$\begin{array}{r} 9) \quad 8938271 \\ + \quad 5093872 \\ \hline \end{array}$$

$$\begin{array}{r} 10) \quad 3929271 \\ + \quad 1623829 \\ + \quad 637285 \\ \hline \end{array}$$

$$\begin{array}{r} 11) \quad 3829184 \\ + \quad 738294 \\ + \quad 2370383 \\ \hline \end{array}$$

$$\begin{array}{r} 12) \quad 5432987 \\ + \quad 216347 \\ + \quad 3782906 \\ \hline \end{array}$$

$$\begin{array}{r} 13) \quad 3204832 \\ + \quad 738721 \\ + \quad 1093763 \\ \hline \end{array}$$

$$\begin{array}{r} 14) \quad 6291873 \\ + \quad 1028372 \\ + \quad 352604 \\ \hline \end{array}$$

$$\begin{array}{r} 15) \quad 6356213 \\ + \quad 4038267 \\ + \quad 1627392 \\ \hline \end{array}$$

$$\begin{array}{r} 16) \quad 2738284 \\ + \quad 827381 \\ + \quad 6472171 \\ \hline \end{array}$$

$$\begin{array}{r} 17) \quad 310390 \\ + \quad 7283912 \\ + \quad 847284 \\ \hline \end{array}$$

$$\begin{array}{r} 18) \quad 1928074 \\ + \quad 738212 \\ + \quad 3820567 \\ \hline \end{array}$$

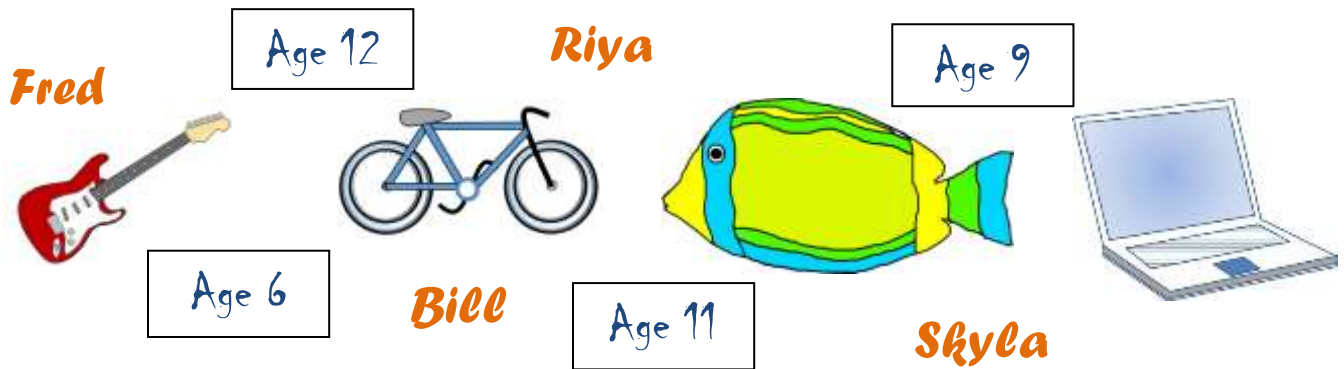


BIRTHDAY BONANZA

Fred, Bill, Skyla and Riya all have birthdays this month.

Their ages will be 6, 9, 11 and 12.

The presents they received are: a guitar, a bike, an aquarium and a laptop.



Use the clues below to find out who got what, and how old they were.

- 1) Riya, who is the second oldest, did not get a guitar.
- 2) The person who got the aquarium was the youngest person who is not Skyla.
- 3) The bike was given to an 11 year old.
- 4) The laptop was given to the oldest person who is not Fred.
- 5) Skyla is not the oldest girl.

PERSON	AGE	PRESENT

TYGER'S MONEY SQUARE CHALLENGE 4:3

To complete this challenge, you need to use the following coins:

Coin				
Number	4	4	4	4

£1.90

£1.70

£1.30

£2.30



£1.90 £1.80 £2.60 90p

In each square you need to place a coin so that the total at the end of each row or column is correct.



DECIMAL COLUMN SUBTRACTION SHEET 3

$$\begin{array}{r} 1) \quad 6.928 \\ - 2.365 \\ \hline \end{array}$$

$$\begin{array}{r} 2) \quad 78.07 \\ - 43.55 \\ \hline \end{array}$$

$$\begin{array}{r} 3) \quad 91.24 \\ - 85.76 \\ \hline \end{array}$$

$$\begin{array}{r} 4) \quad 670.2 \\ - 158.8 \\ \hline \end{array}$$

$$\begin{array}{r} 5) \quad 5.037 \\ - 2.475 \\ \hline \end{array}$$

$$\begin{array}{r} 6) \quad 71.25 \\ - 67.89 \\ \hline \end{array}$$

$$\begin{array}{r} 7) \quad 30.37 \\ - 9.75 \\ \hline \end{array}$$

$$\begin{array}{r} 8) \quad 67.2 \\ - 38.45 \\ \hline \end{array}$$

$$\begin{array}{r} 9) \quad 4.172 \\ - 0.684 \\ \hline \end{array}$$

$$\begin{array}{r} 10) \quad 62.90 \\ - 37.67 \\ \hline \end{array}$$

$$\begin{array}{r} 11) \quad 8.730 \\ - 2.266 \\ \hline \end{array}$$

$$\begin{array}{r} 12) \quad 651.6 \\ - 281.3 \\ \hline \end{array}$$

$$\begin{array}{r} 13) \quad 8.403 \\ - 1.675 \\ \hline \end{array}$$

$$\begin{array}{r} 14) \quad 572.1 \\ - 485.3 \\ \hline \end{array}$$

$$\begin{array}{r} 15) \quad 79.83 \\ - 54.61 \\ \hline \end{array}$$

$$\begin{array}{r} 16) \quad 972.8 \\ - 565.4 \\ \hline \end{array}$$

$$\begin{array}{r} 17) \quad 7.021 \\ - 4.968 \\ \hline \end{array}$$

$$\begin{array}{r} 18) \quad 8.38 \\ - 3.725 \\ \hline \end{array}$$

$$\begin{array}{r} 19) \quad 40.08 \\ - 28.76 \\ \hline \end{array}$$

$$\begin{array}{r} 20) \quad 6.731 \\ - 3.482 \\ \hline \end{array}$$

$$\begin{array}{r} 21) \quad 4.506 \\ - 2.758 \\ \hline \end{array}$$

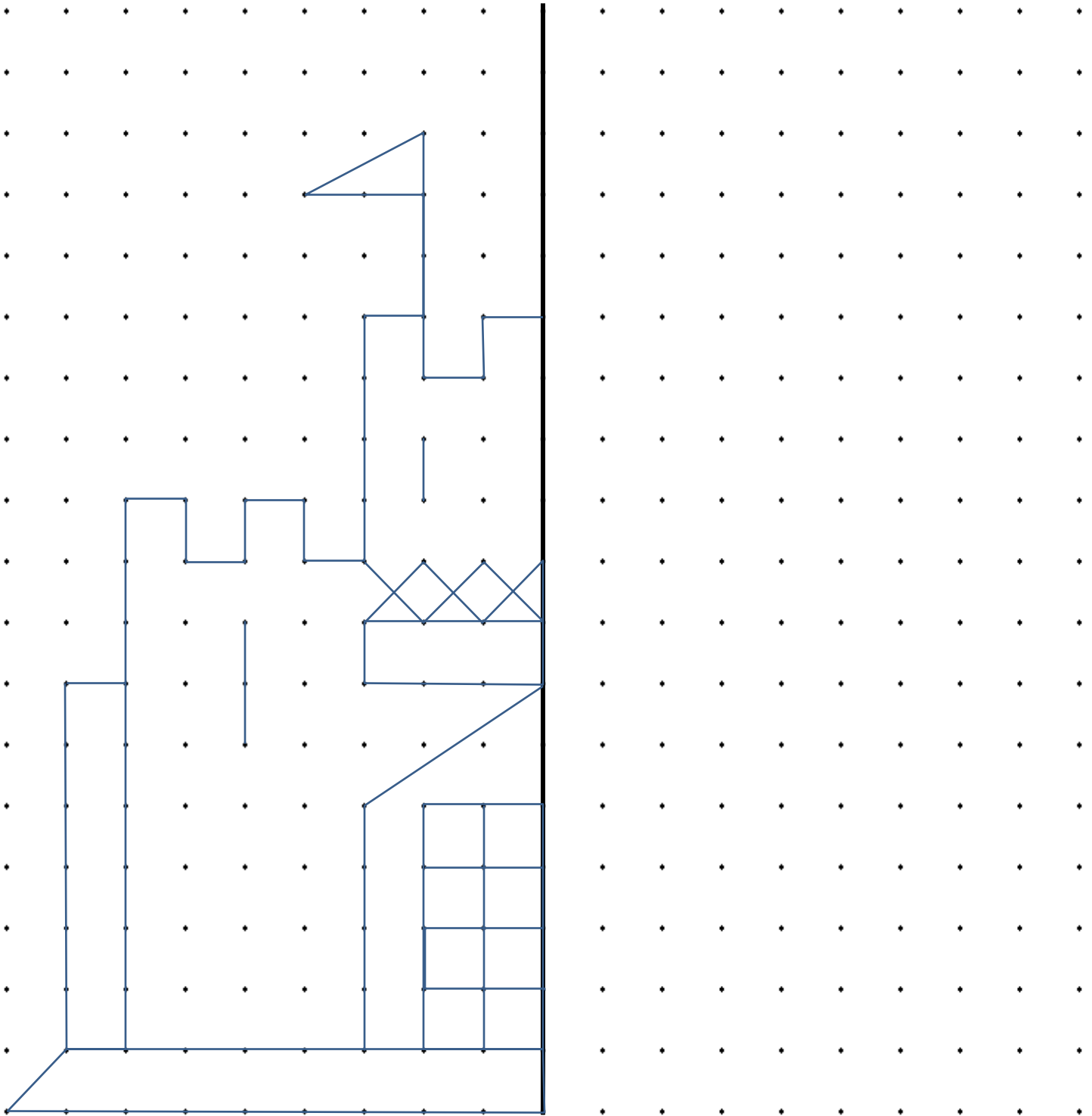
$$\begin{array}{r} 22) \quad 92.7 \\ - 16.49 \\ \hline \end{array}$$

$$\begin{array}{r} 23) \quad 80.02 \\ - 36.8 \\ \hline \end{array}$$

$$\begin{array}{r} 24) \quad 7.206 \\ - 4.564 \\ \hline \end{array}$$



1 LINE SYMMETRY PICTURE CASTLE



PLACE VALUE RIDDLES 5A

Select the correct answer from a choice of 8 possibilities.

1) I am larger than 3 million.

I am less than $3\frac{1}{2}$ million.

My largest digit is my ten thousands digit.

I am a multiple of 5.

Who am I?

3,247,180	2,853,918	3,892,100	4,235,105
3,072,130	3,584,325	30,291,300	4,138,282

2) I am less than half a million.

My thousands digit is a multiple of 3.

I am more than a quarter of a million.

I am odd.

Who am I?

347,283	1,206,311	4,286,135	814,277
233,117	416,532	379,513	2,130,767



DECIMALS TO PERCENTS & FRACTIONS SHEET 1



DECIMAL	PERCENT	FRACTION
0.6	60%	$\frac{60}{100} = \frac{3}{5}$
0.2		
0.5		
0.25		
0.75		
0.12		
0.45		
0.42		
0.81		
0.47		
0.18		
0.04		
0.125		
0.39		
1.3		



MAGIC SQUARE WORKSHEET 4.3

In a magic square, each row, column and diagonal add up to the same total.
Can you fill in the missing numbers in these magic squares?

1) The sum is 34.

	2	16	
	13		6
1	8		15
14		5	

2) The sum is 68.

	24	2	
4		16	22
32	6	20	
			8

3) The sum is 340.

		160	
120		30	60
	80		150
140	110		40

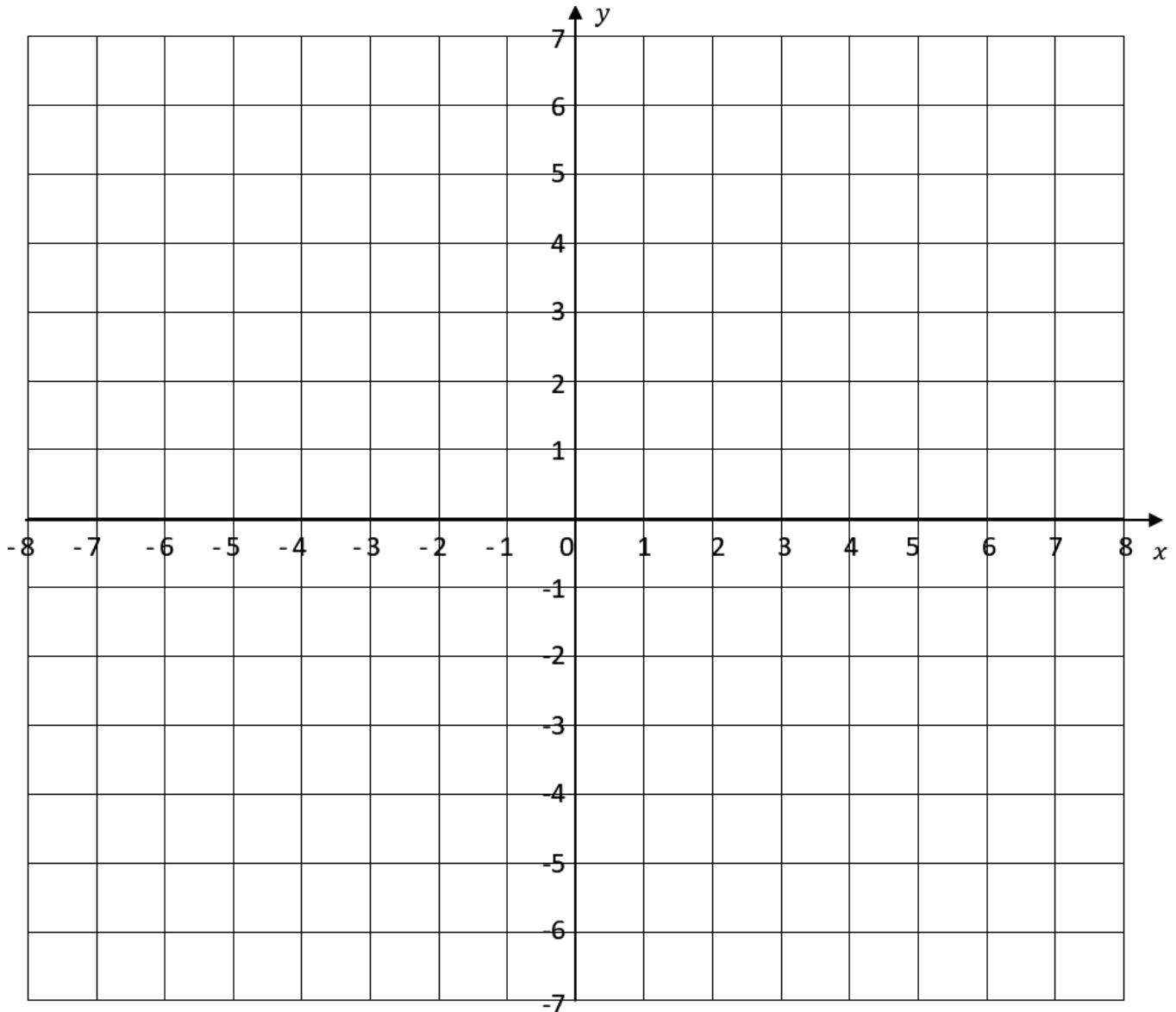
4) The sum is 102.

48	6	9	
	33		24
27			
	42	45	3



PLOT THE COORDINATES 1

Plot the coordinates below, joining each coordinate as you plot them. Shade each set of coordinates once you have finished joining all the sets up.



SET 1: Brown

$(-8, -1), (-7, -2), (-7, -4), (-5, -6), (3, -6), (5, -4), (4, -6), (6, -6), (6, -2), (7, -1), (7, 0), (2, 0), (2, -2), (-5, -2), (-6, -1), (-8, -1)$

SET 2: Choose your own design

$(-5, 5), (-7, 4), (-7, 1), (-5, -2), (-3, -1), (-2, -1), (2, -2), (0, 2), (0, 4), (2, 5), (-5, 5)$

SET 3: Brown

$(-3, -2), (-2, -2), (-2, 7), (-3, 7), (-3, -2)$

SET 4: Choose your own design

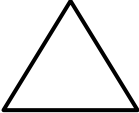
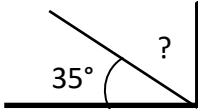
$(-2, 7), (1, 7), (2, 6), (4, 6), (5, 5), (4, 5), (1, 6), (-2, 6), (-2, 7)$

Set 8: Choose your own design

$(4, 0), (4, 4), (8, 4), (7, 3), (8, 2), (4, 2)$



MENTAL MATHS QUIZ 6:3

1)	$\frac{1}{3} + \frac{1}{6}$	
2)	Convert $1\frac{3}{4}$ into a decimal	
3)	I am between 20 and 30. I am a multiple of both 3 and 4. Who am I?	
4)	Round 5.824 to the nearest whole number.	
5)	$4 \times 7 = 30 - \underline{\quad}$	
6)	Find $\frac{3}{7}$ of 35	
7)	The time is 7:35am. What is the time in the 24-hour clock?	
8)	Which is the largest ? 0.62 0.47 0.8 0.67 0.53 0.09	
9)	0.6×4	
10)	What is the median of: 35, 27, 51, 31, 28, 19, 33	
11)	How many lines of symmetry? 	
12)	Captain has £80. Flame has a £20 note plus seven £5 notes. How much more money does the Captain have?	
13)	(1 foot = 12 inches) How many inches is $5\frac{1}{2}$ feet?	
14)	Sally pays £25 for two tubes of paint: a blue tube and a red tube. The blue tube cost £7 more than the red tube. How much did each tube cost?	
15)	I am facing north-east. I turn a right angle clockwise. What direction am I facing now?	
16)	What is the missing angle? 	
17)	$0.73 + \underline{\quad} = 1$	
18)	If $x + 9 = 13$, what is the value of x ?	

FRACTION-DECIMAL GAME

The Fraction-Decimal game is designed to make children more aware of fraction-decimal equivalence. They have to create a fraction from the rolls of two dice and then convert this fraction into a decimal and find the decimal on the board.

Age range: 5th Grade +

Number of players: 2-4

Learning: Convert fractions to decimals, rounding to 3 decimal places

You will need

- 20 counters in different colors (one color per player)
- 2 dice
- A calculator

Instructions

- Player 1 throws both dice, and then chooses one of the numbers to be the numerator and the other to be the denominator of a fraction.
- Player 1 then tries to convert this number to a decimal mentally.
- Player 2 checks Player 1's decimal by dividing the numerator by the denominator using a calculator (and rounding to 3 decimal places where appropriate).
- If Player 1 is correct, they get to place their counter on the board covering the decimal up. If Player 1 is incorrect, it is Player 2's turn.
- Player 2 then takes their turn to roll both dice and convert their fraction into a decimal. Player 1 checks this on a calculator.
- The winner is the first player to get 3 counters in a row.

Variations

- The winner is the player with the most counters on the board after a certain time limit (or when the board is filled up with counters). This variation works better for 3 or 4 players.
- To make the game easier (or quicker), a player can choose one dice per turn to re-roll if they wish.
- To make the game even simpler and easier, players can say any fraction which matches a decimal on the board and cover it up, e.g. 'six-tenths matches 0.6'.
- In a 3-player game, one player can be a 'checker' and check the decimals are correct using a calculator.

FRACTION-DECIMAL GAME

Roll 2 dice. Choose one number for the numerator and one number for the denominator.

Now convert this fraction into a decimal!

Round your decimal to 3dp and cover part of the grid.

→

?

?

0.2	5	0.167	0.333	1	0.6
0.5	1.333	1.25	0.667	6	0.75
0.4	1.2	0.25	0.833	1.5	2
3	1.5	1.667	2.5	0.8	0.667
0.333	270	0.6	4	0.5	1.25

The first player to get three in a row is the winner!

