

TEACHERS' NOTES

Ratio and Proportion

<i>Pupil</i>	<i>Paper 1</i>		<i>Paper 2</i>		<i>Average %</i>	<i>Rank by average %</i>	<i>Total mark</i>	<i>Rank by total number</i>
	<i>mark</i>	<i>%</i>	<i>mark</i>	<i>%</i>				
Adam	75	75	45	30	52.5%	4	120	4
Brian	70	70	60	40	55%	3	130	3
Cathy	62	62	105	70	66%	1	167	1
Debbie	60	60	48	32	46%	5	108	5
Susie	90	90	60	40	65%	2	150	2

Directed Numbers

Support could be to provide pupils with the set of integers involved ie:

-5 -4 -2 -2 0 1 3 3 6

Solution:

-5	3	1
3	6	-2
0	-4	-2

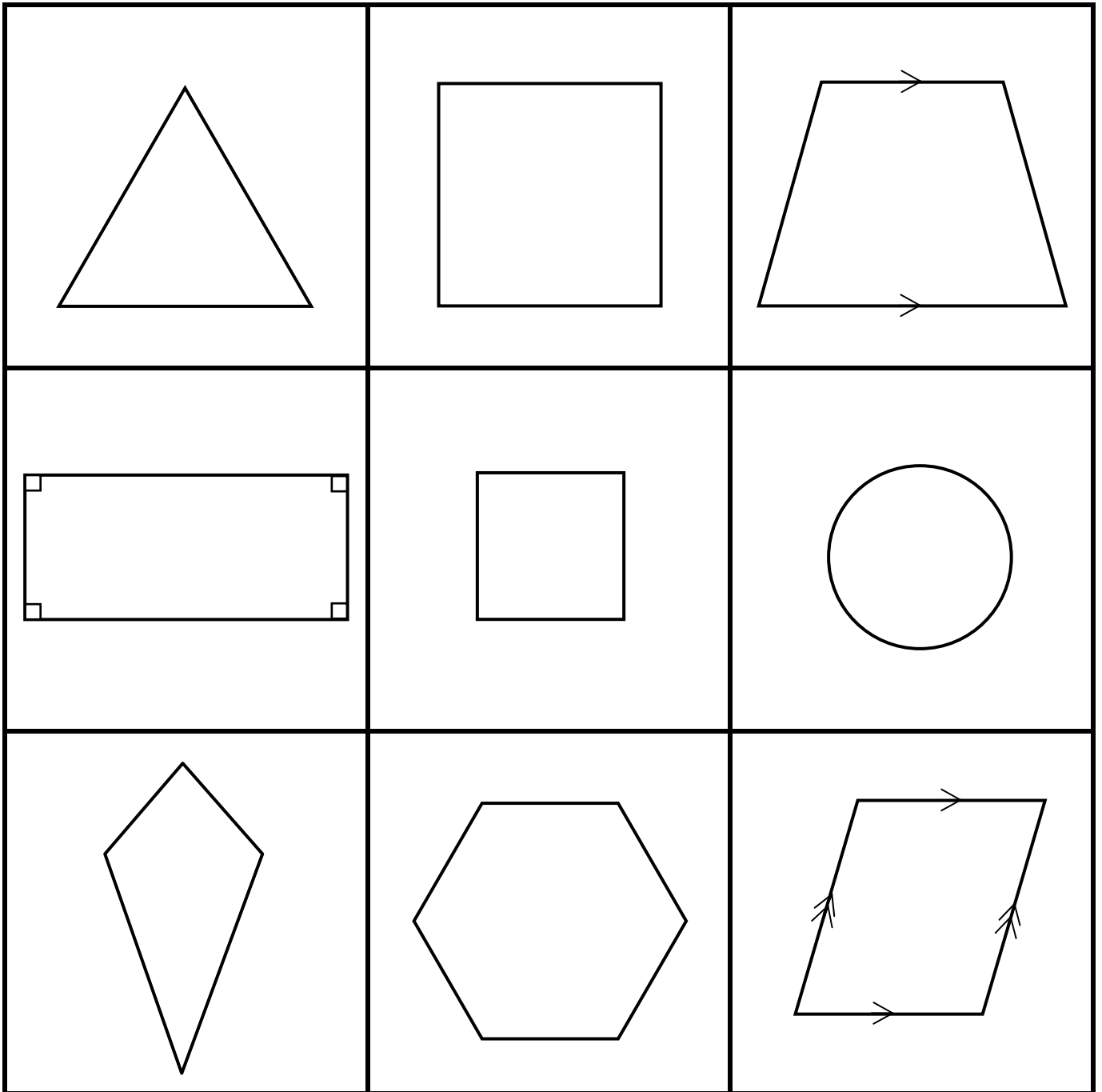
Algebra

Support could be to provide pupils with the set of 9 algebra cards (page 10/16) that form the solution or the set of 12 cards, which include some 'rogue' cards.

Properties of Shape

Support could be to provide pupils with the set of 9 shape cards (page 12/16) that form the solutions or the set of 15 cards, which include some 'rogue' cards.

Solution: see page 12/16 for one solution. Another solution is to swap the kite with the isosceles trapezium.



Locus

Demonstrate the range of possible solutions as **BC** varies by using a dynamic geometry package.

Probability

More cards are given than are necessary to find a solution - a smaller sufficient set might support some pupils.

Solution: **E** is most likely to win, with a probability of 0.7. Sequence is **E** (first), **A**, **C**, **B** or **F** in either order, **D** (last).