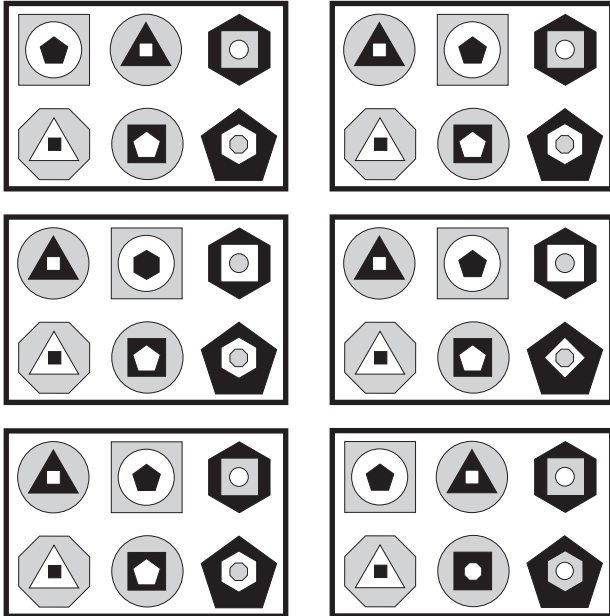


PROBLEM SOLVING 1

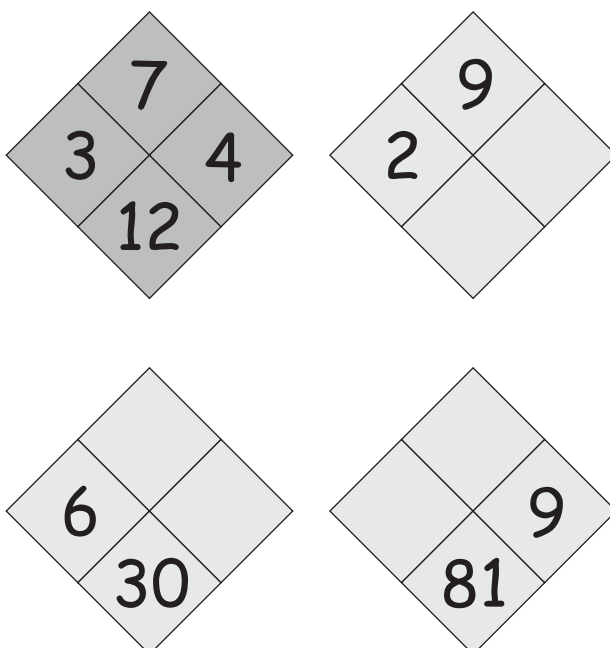
MARK

31

1. Colour in the two boxes below that are exactly the same.



2. Use the links between the numbers in the first diamond to complete the other three diamonds.

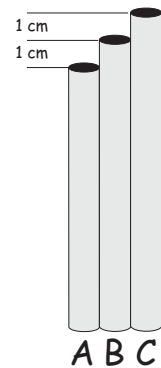


3. Raphael had a 36 cm length of pipe that he wanted to cut into three pieces: A, B and C. B is 1 cm longer than A. C is 1 cm longer than B. Find the length of the three pipes.

A cm

B cm

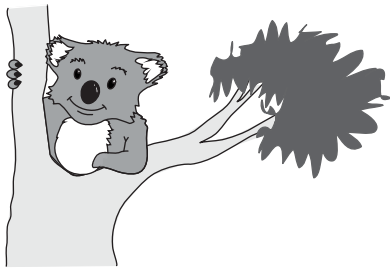
C cm



4. Alicia was looking out of her kitchen window at 9 o'clock one morning and saw her brother outside as shown below. Is Alicia's kitchen window facing north or south?



5. A koala could climb a tree at the rate of one metre every second but had to stop every five seconds for a ten second rest. How many seconds would it take the koala to climb 20 metres?

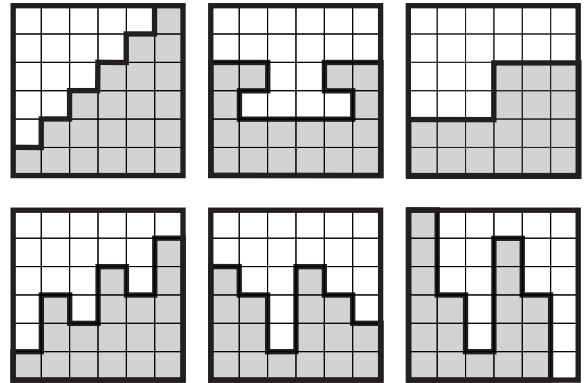


6. Venus wanted to buy 10 fish for her fish tank. She had saved \$24 and decided to spend all of this on the fish. At the pet shop goldfish cost \$2 each and guppies cost \$3 each. How many of each fish could she buy if she spent \$24? (Remember she is buying 10 fish)

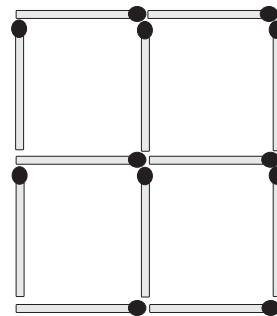
Goldfish

Guppies

7. Colour in those squares below that if cut into the two shapes shown would form two identical shapes.



8. (a) Show which **two** of the matches in the diagram below could be removed to leave **two** squares.



- (b) Redraw the matches but with **four** moved to form **three** squares.