

Year 2 reasoning examples

Fill in the missing numbers using 1,2,4 and 7

	<	<	8
^		v	v
5	<	6	>
v		^	v
	<	9	>

How many two digit numbers can you make using the digit cards?



What is the largest number?  
Prove it by using concrete resources.

What is the smallest number?  
Prove it by using concrete resources.

Why can't the 0 be used as a tens number?

There are three dolls in each basket.

There are four baskets.

How many dolls are there altogether?

Draw and image and write a calculation to represent the problem.

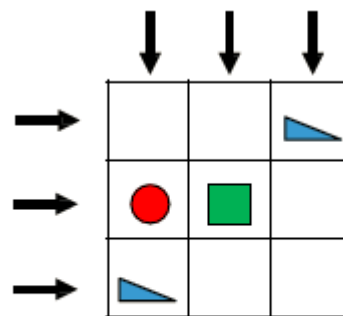
Tomas says, "I know that 10 more than 72 is 82 because I only have to look at the tens digit."

Is he correct?

Explain your reasoning.

Molly is counting backwards in 10s. She says forty nine, thirty nine, twenty nine and then stops.

What numbers comes next and why?



Squares are worth 10  
Triangles are worth 20  
Circles are worth 30

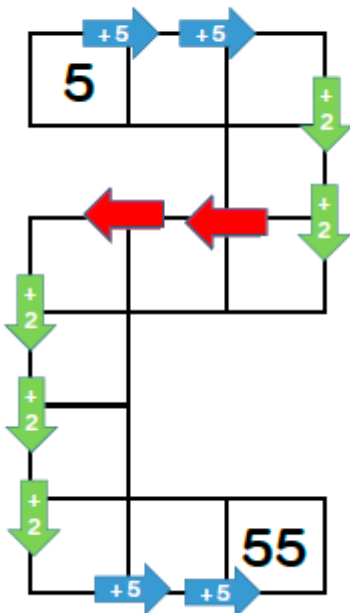
Can you complete the grid above so that all horizontal and vertical lines equal 60?

Can children create another pattern on an empty grid where each line equals 60?

How many possible ways are there to solve this?

Using these numbers, travel from 5 to 53 by using the arrows.

10, 29, 43, 15, 17, 45, 39, 19, 41, 50



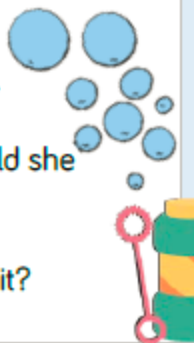
What do the red arrows show?

Tubes of bubbles come in packs of 2 and 5.

Lily has 22 tubes of bubbles.

How many of each pack could she have?

How many ways can you do it?



Captain Conjecture says,  
'An odd number + an odd number + an odd number = an even number.'  
Is this sometimes, always or never true?

Explain your reasoning.

Concrete resources might help pupils to explain their reasoning.



Fill in the missing boxes.

$$3 \times \square = 6$$

$$\square \times 2 = 20$$

$$7 \times 2 = \square$$

Thomas says that  $10 \times 2 = 22$

Is he correct?

Explain how you know.

On sports day, Tom runs 10 metres, 7 times.



Which of the calculations do not describe the word problem?

$$10 + 7$$

$$7 \times 10$$

$$7 + 7 + 7 + 7 + 7 + 7 + 7$$

$$10 + 10 + 10 + 10 + 10 + 10 + 10$$

Explain why.