Problem Solving Strategies



Checking for relevant and irrelevant information

Class photo

The school photographer is lining up these five students: Roxy, Grommet, Charlie, Ace and Mosh, for the back row of their class photo.

Use the information below to sort the students from tallest to shortest.

- 1 Mosh is taller than Ace.
- 2 Ace has black hair.
- 3 Ace is taller than Roxy.
- 4 Roxy has loose shoelaces.
- 5 Charlie is shorter than Roxy.
- 6 Roxy likes iced coffee.
- 7 Grommet is taller than Roxy, but shorter than Ace.
- 8 Roxy wears a bracelet.





Check for relevant and irrelevant information by re-reading the list to consider only what the question is asking.

Points 2, 4, 6 and 8 can be eliminated because they do not contain information about the height of the students.

The line up from tallest to shortest is Mosh, Ace, Grommet, Roxy and Charlie.

1 Guessing and checking	6 Checking for relevant and irrelevant information 🖌
2 Constructing a table, chart or graph	7 Identifying smaller tasks within a larger problem
3 Drawing a picture or diagram, or making a model	8 Making an organised list to account for all possibilities
4 Acting out the problem	9 Solving a similar or simpler problem
5 Identifying a pattern or using a rule	10 Working backwards

Problem Solving Strategies



Checking for relevant and irrelevant information

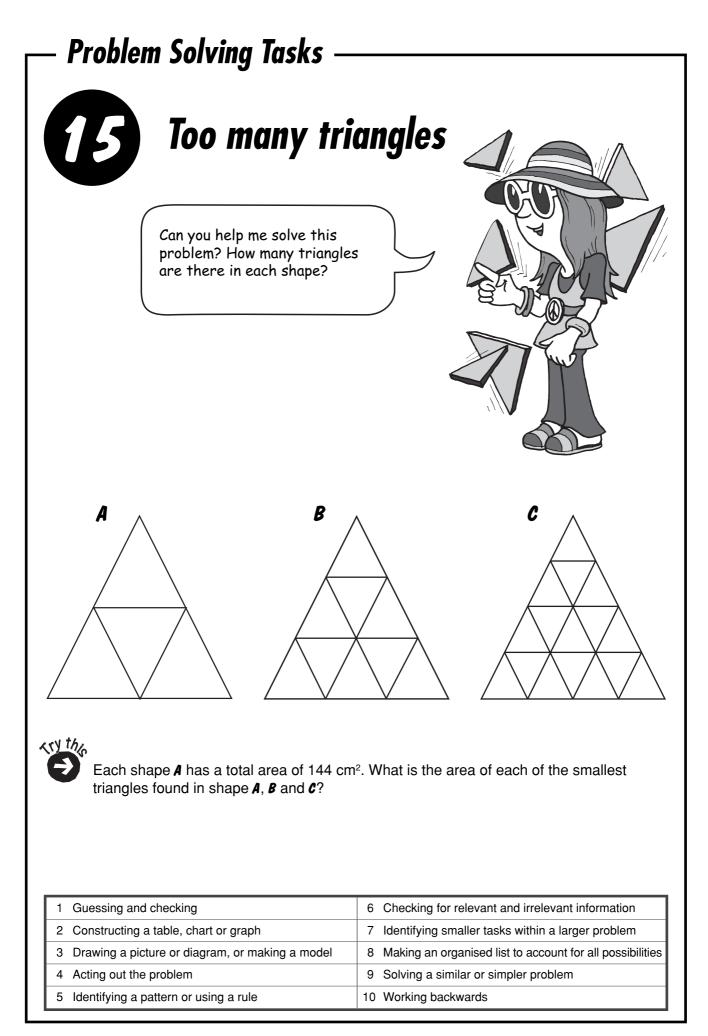


At the finish line of the school 100m sprint final the judges were having trouble deciding the order of runners. Use the following information to sort out the order of runners.

At the finish line...

- 1. Mosh finished before Ace.
- 2. Ace wore new track shoes.
- 3. Ace was in front of Roxy.
- 4. Roxy got off to a bad start.
- 5. Charlie was beaten by Roxy.
- 6. Roxy won last year.
- 7. Grommet finished in front of Roxy but behind Ace.
- 8. Ace wore spikes to help him.

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— Problem Solving Strategies and Tasks

JIGSAW MATHS 7 PROBLEM SOLVING TASK CHECKLIST

Task	Which strategies used?	Completed and checked (✓)	Task	Which strategies used?	Complete and check ()
1 Mystery numbers			21 Movie moves		
2 Footy finals facts			22 Chemical balance		
3 That's torn it			23 Orchard trees		
4 Bus breakdown			24 Cablecar		
5 Woofster's cross			25 Food forage		
6 Perfect 10			26 Cash crisis		
7 Mosh's bouncer			27 Thick stack, thin stack		
8 By half			28 Tide times		
9 Ace fitness			29 At all a tall		
10 Four way puzzle			30 Pyramid area		
11 Triangle assistance			31 Family order		
12 Painting price			32 Pop stars		
13 Too many squares			33 Friendship potions		
14 Triangle search			34 Chinese numbers		
15 Too many triangles			35 Lucky dice		
16 More triangles			36 Wheels		
17 Pruning			37 Prize golf		
18 Two squared cubes			38 Fair pairs		
19 Twenty counters			39 Dinner is served		
20 No more gaps			40 Accessorise		

The strategies are numbered to help you in completing the *Which strategies used*? box in the Task Checklist above. Simply write the numbers of the strategies you used in the space next to the task. Your teacher will tick (\checkmark) the problem when it has been completed and checked.

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