Day 4 Answers
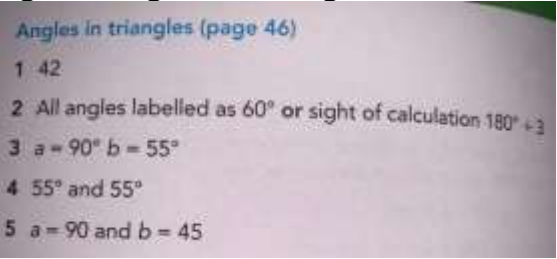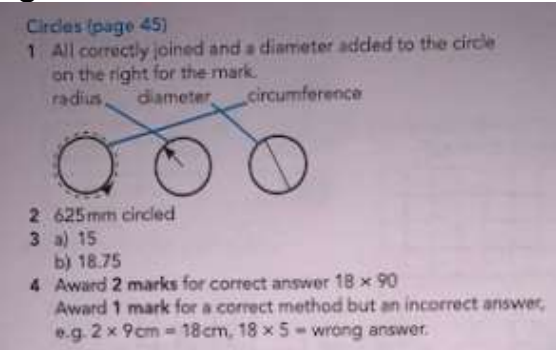
Task 1	Task 2	Task 3

SATs Book Activities
 Developing/ Expected
 Pg. 46 Angles in triangles
 	
 Angles in triangles (page 46)
 1 42
 2 All angles labelled as 60° or sight of calculation 180° ÷ 3
 3 $a = 90°$ $b = 55°$
 4 55° and 55°
 5 $a = 90$ and $b = 45$
 	
 Greater Depth
 Pg. 43 Circles
 	
 Circles (page 45)
 1 All correctly joined and a diameter added to the circle on the right for the mark.
   radius   diameter   circumference
 2 625mm circled
 3 a) 15
   b) 18.75
 4 Award 2 marks for correct answer 18 × 90
   Award 1 mark for a correct method but an incorrect answer, e.g. 2 × 9cm = 18cm, 18 × 5 = wrong answer.
	Arithmetic
	
	 15. 27
	
	 16. $5\frac{7}{9}$
	
	 17. 0.1205
	
	 18. 0.42
	
	 19. 24 [1]
	
	 20. 45.35 [1]
	
	 21. For 2 marks: 18 405 [2]
	
	   For 1 mark:
	
	   $$\begin{array}{r} 409 \\ \times\ \ 45 \\ \hline 2045 \\ 16360 \\ \hline 18405 \end{array}$$
	
	   An error in one row, then added correctly, **or** an error in the addition
		Problem Solving/ Reasoning
		 Task 1
		
		   540
		
		 Task 2
		 Award **TWO** marks for the correct answer of 104°.
		
		 If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g:
		
		 • $180 - 38 - 38 = a$
		       *Answer need not be obtained for the award of **ONE** mark.*
		
		 Task 3
		 An explanation that includes a correct counter example, e.g.
		
		 • When you double 10° it is not obtuse
		 • $2 \times 27° = 54°$
		 • Double 45° is a right angle not obtuse
		
		 OR
		
		 An explanation that demonstrates where the statement in the question is not correct, e.g.
		 • If the acute angle is less than 45° then doubling it will be less than 90°, so it won't be obtuse (more than 90°).
		    Do not accept vague or incomplete explanations, e.g.
		    • Sometimes it will be acute
		    • Some acute angles are half an obtuse angle, but not all
		    • When you double an acute angle, you get a right angle
		    Do not accept explanations which include incorrect mathematics or incorrect information that is relevant to the explanation, e.g.
		    • 20°C × 2 = 40°C
		    • 20% × 2 = 40%

Day 4 Answers

		Task 4 An explanation showing an understanding: • that this specific triangle has angles 70, 70 and 40 **OR** • of the properties of an equilateral triangle – all angles are equal (60°) and therefore that this triangle cannot be equilateral, e.g. • The angles aren't 60° • There is not a 60° angle • It has two different angles (70° and 40°) so it can't be equilateral • The angles aren't the same • An equilateral triangle has 60° + 60° + 60° • All the angles are the same in an equilateral triangle • It's an isosceles triangle. (In the context of this question, the term isosceles triangle is treated as not including equilateral triangles as a special type, as the national curriculum does not specify this at key stage 2.) *Do not* accept vague or incomplete explanations, e.g. • *The other angle is 70°* • *They aren't (all) the same. (No reference to angles)* • *An equilateral triangle has equal angles. (Does not say all.)* *Do not* accept explanations which include incorrect mathematics or incorrect information that is relevant to the explanation, e.g. • *40 + 70 = 110 + 70 = 180*