Day 349	B Tier 10-a-day
1 A rectangular poster measures 13 cm by 11 cm. A rectangle measuring 6 cm by 4 cm is cut out. Work out the area that is left.	
2 The ratio of adults to children among the people on a bus is 9 : 1. There are 8 children. How many adults are there?	
3 A jug holds 1.625 litres of juice. Each glass holds 125 ml. How many glasses can be filled from the jug?	
4 Expand (a) $6(3x - 3)$ (b) $2x(x + 5)$	
5 Triangle PQR has angles of 40° and 75°, and a side of 6 cm between them. Triangle XYZ has angles of 75° and 40°, and a side of 6 cm between them. Are the two triangles congruent? Give a reason for your answer.	

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6 Solve $3x + 4 = 15$ Give your answer as a fraction in its simplest form.	
7 Work out (a) $\frac{1}{3} + \frac{4}{5}$ (b) $\frac{4}{5} - \frac{1}{12}$ Give each answer in its simplest form.	
8 An isosceles trapezium has parallel sides of length 17 cm and 5 cm. Each sloping side is 10 cm long. (a) Work out the perpendicular height of the trapezium. (b) Work out the area of the trapezium.	
9 A car travels at 63 km/h. Work out its speed in metres per second.	
10 A shop sells pens and pencils. All pens cost the same and all pencils cost the same. 2 pens and 1 pencil cost 250p. 1 pen and 1 pencil cost 135p. Work out the cost of one pen and the cost of one pencil.	