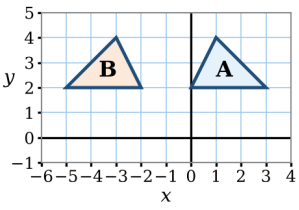
Day 268	A Tier 10-a-day
1 (a) A coach leaves Leeds at 7:05 pm. The journey takes 3 hours 52 minutes. Work out the time it ends. (b) Change 105 minutes into hours. Give your answer as a decimal.	
2 A car travels at 36 km/h. Work out this speed in metres per second.	
3 Describe fully the single transformation that maps shape A onto shape B. 	
4 Factorise $3x^2 - 5x - 12$	
5 A piece of wood has a mass of 276 g. The density of the material is 1.2 g/cm^3. Work out the volume of the piece of wood.	

Day 268	A Tier 10-a-day
6 Two similar statues have heights 8 cm and 12 cm. The smaller one has a volume of 48 cm^3. Work out the volume of the larger one.	
7 Rationalise the denominator of $\frac{8}{\sqrt{8}}$ Give your answer in its simplest form.	
8 A is the point $(-2, 8)$ and B is the point $(4, 2)$. Find the equation of the perpendicular bisector of AB.	
9 Aisha invests £2,500 in a savings account. (Calculator) Compound interest is paid at a fixed rate each year. After 2 years the investment is worth £2,652.25. Work out the annual rate of interest.	
10 $f(x) = x^3 - 2x^2 + 5x - 2$ Show that the equation $f(x) = 0$ has a solution between $x = 0$ and $x = 1$.	