Problem Solving Week 3

Foundation:

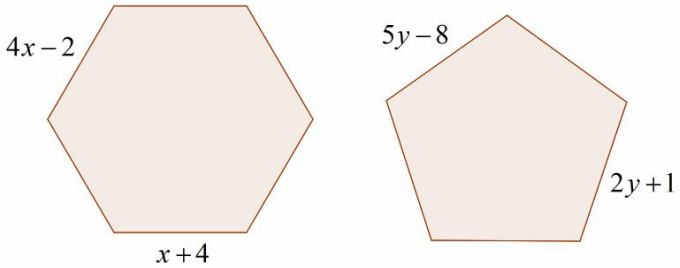
Petrol costs 90p a litre and a car can travel 8 miles on one litre of petrol. John needs to travel 45 miles in his car one day.

Which of the following calculations can John use to find out the cost of his journey in pounds? **You must give a reason for your choice**.

(a) $\frac{0.9\times 8}{45}$ (b) $90\times 45\div 8$ (c) $\frac{45}{8}\times 90$ (d) $8(0.90)\div 45$ (e) $0.9\times(45\div 8)$

Higher:

Below is a diagram showing a regular hexagon and a regular pentagon. Each shape has the lengths of two sides shown in terms of x or y.



Find which of the two shapes has the greatest perimeter. You must clearly show how you found your answer. The shapes are not drawn to scale.

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