

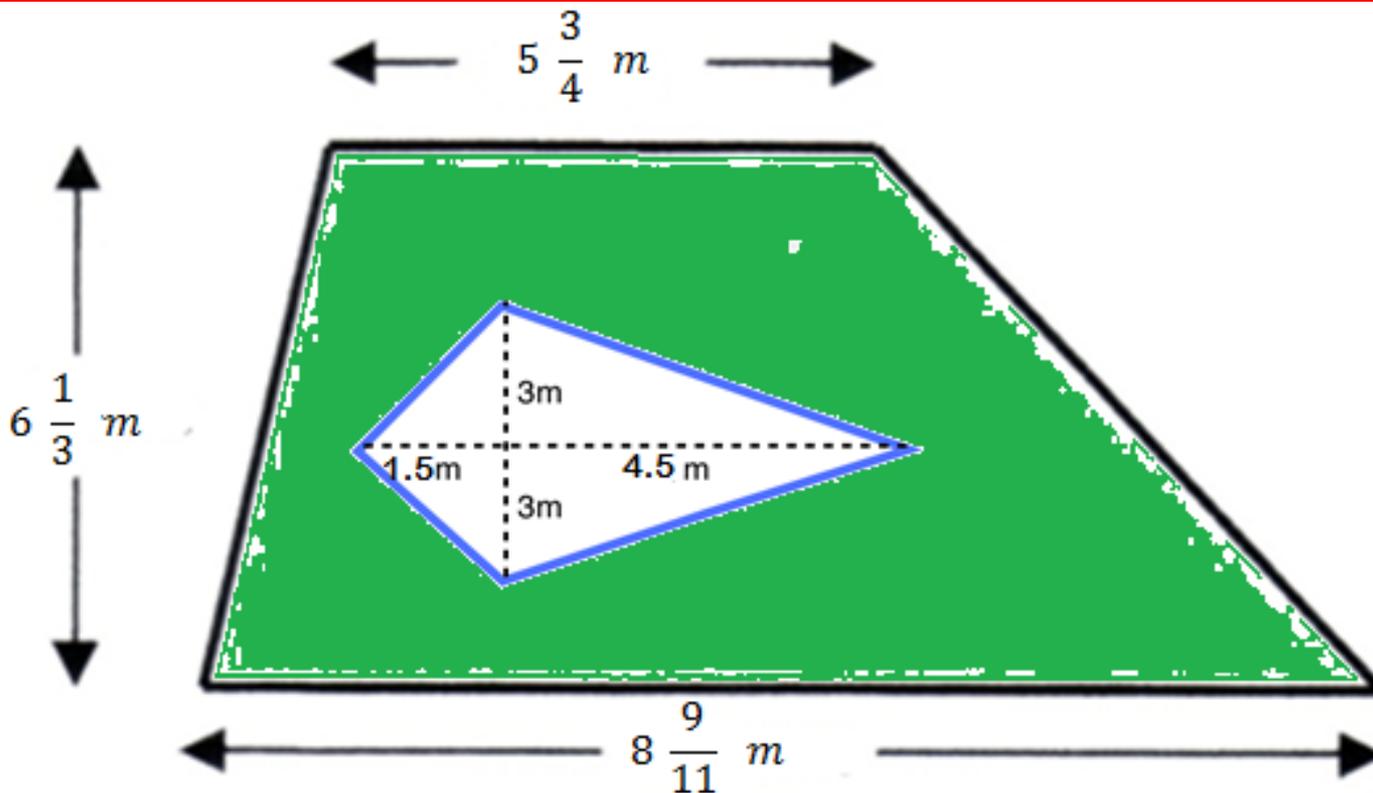
New Style Of Numeracy Starter

This is the new style of numeracy starter I will be using for the foreseeable future, this may be tweaked for the first few weeks. The whole point of this new style is to train the students how to revise Maths and to try and make them more independent outside of the classroom. If you have any questions please don't hesitate to ask.

This week I would like to recap the previous three weeks by using skills they have learnt when looking at area and fractions.

How Do I Revise Maths?

Jessie has just moved house, her yard is a peculiar shape so she wants to transform it into a grassed area with a flower bed. Once the area has been primed she will need some rolls of grass for the green area as shown and she will also need some soil for her kite shaped flower bed. A $2m^2$ roll of grass costs £7 and a bag of soil that covers approximately $3m^2$ costs £1.42. How much will the materials cost Jessie?



You are going to need to look back on your last 3 weeks of revision to be able to answer this question.

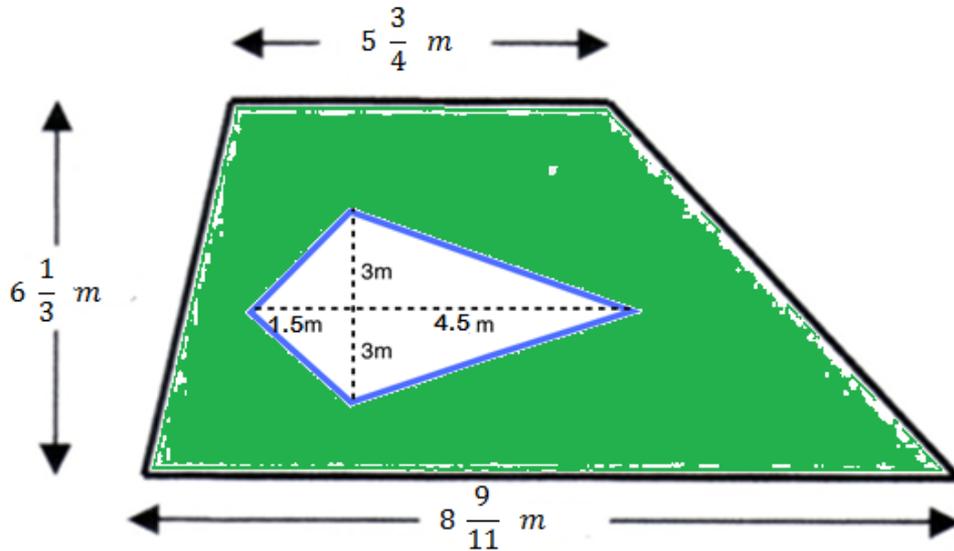
But I've Forgotten How To Work With Fractions And Find Areas

You should make a revision aid every time you revise, this way you have something you can keep referring back to. If you revise something one day then look over it for 10 minutes the next day and 5 minutes the day after that you WILL retain more of the information. Why put hours of work in then waste those hours by never re-visiting areas?

If you're struggling to remember at this point revisit shape areas and fraction work now and make yourself some flash cards or a poster.

Answer

Jessie has just moved house, her yard is a peculiar shape so she wants to transform it into a grassed area with a flower bed. Once the area has been primed she will need some rolls of grass for the green area as shown and she will also need some soil for her kite shaped flower bed. A $2m^2$ roll of grass costs £7 and a bag of soil that covers approximately $3m^2$ costs £1.42. How much will the materials cost Jessie?



Area Of Flower Bed

Area of kite: $\frac{1}{2} \times \text{height} \times \text{width}$

Area of kite: $\frac{1}{2} \times 6 \times 6$

Area of kite : $18m^2$

$18m^2 \div 3 = 6$ so need 6 bags costing £8.52

Total cost: £105+ £8.52 = £113.52

Area Of Grassed Area

Area of trapezium: $\frac{1}{2} (a + b)h$

Area of trapezium: $\frac{1}{2} \left(5\frac{3}{4} + 8\frac{9}{11} \right) \times 6\frac{1}{3}$

Area of trapezium: $\frac{1}{2} \left(\frac{23}{4} + \frac{97}{11} \right) \times \frac{19}{3}$

Area of trapezium: $\left(\frac{253}{44} + \frac{388}{44} \right) \times \frac{19}{6}$

Area of trapezium: $\left(\frac{641}{44} \right) \times \frac{19}{6}$

Area of trapezium: $\frac{12179}{264} m^2$

$12179 \div 264 = 46.13... m^2$

Take away area of flower bed $28.13... m^2$

Each roll covers $2m^2$ so $28.13 \div 2 = 14.06 ...$ so need 15 rolls costing £105