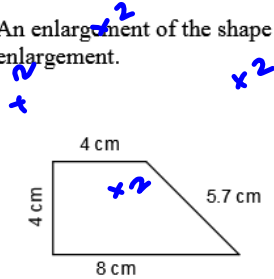


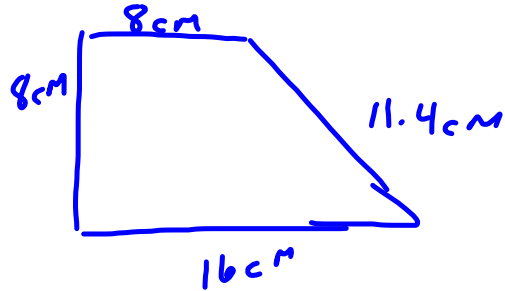
April 10, 2019

warm-up

1. An enlargement of the shape below is made using a scale factor of 2. Determine the side lengths of the enlargement.

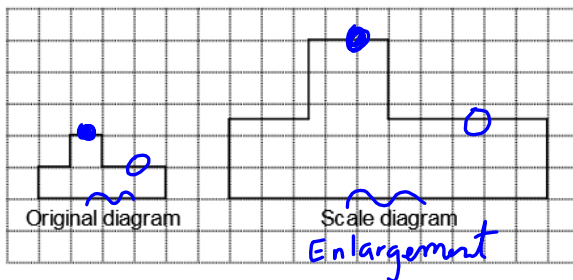


Sketch with new dimensions



2. Determine the scale factor for this scale diagram.

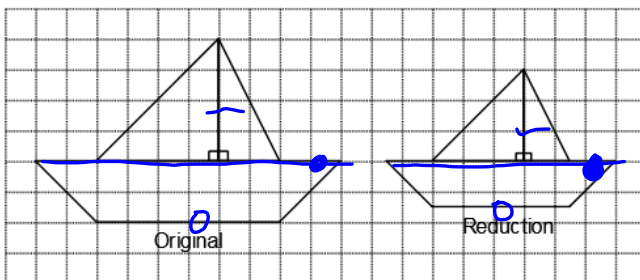
Scale factor = $\frac{\text{scaled}}{\text{original}}$



$$\begin{array}{r|l} \sim & 0 \\ \hline \frac{10}{4} = 2.5 & \frac{5}{2} = 2.5 \\ & \frac{2.5}{1} = 2.5 \end{array}$$

S.F. = 2.5

3. Determine the scale factor of this reduction as a fraction and as a decimal.

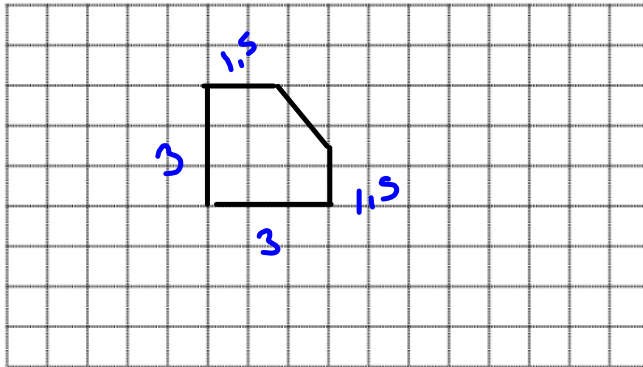
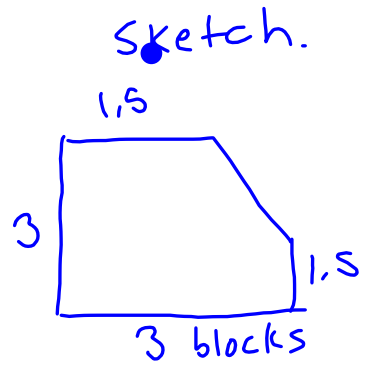
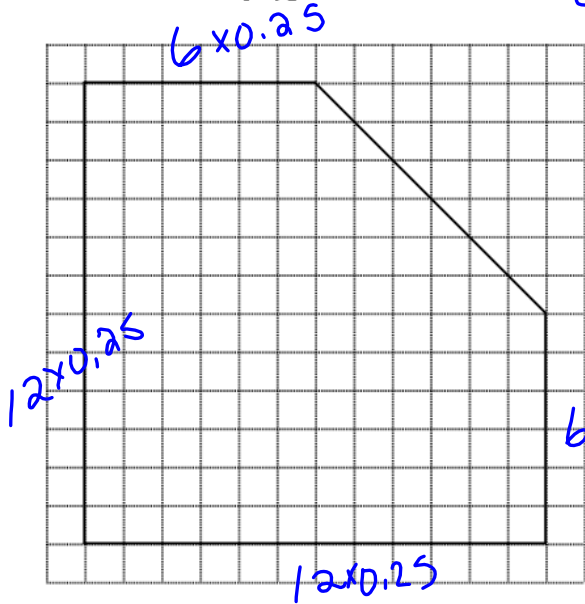


$$\begin{array}{r|l} \sim & 0 \\ \hline \frac{3}{4} & \frac{4.5}{6} \\ & \frac{2.5}{10} \end{array}$$

S.f. = 0.75

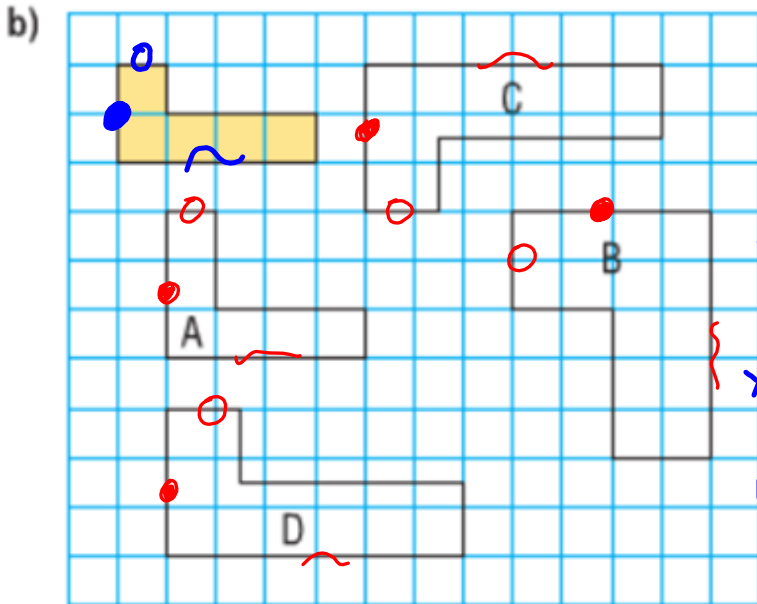
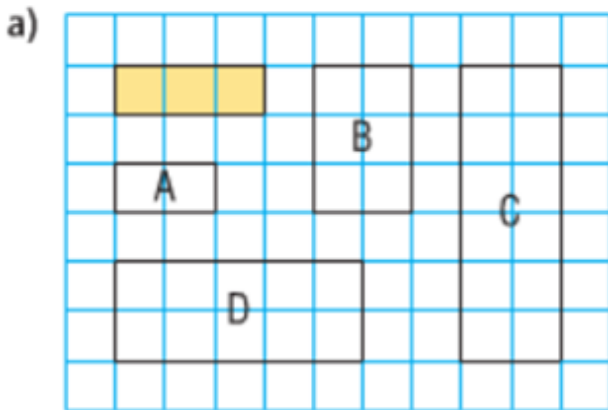
4. Make a reduction of this polygon. Use a scale factor of $1/4$

[0.25] Scaled Diagram



below, identify which of diagrams A, B, C, and D are scale diagrams of the shaded shape. For each scale diagram you identify:

- i) State the scale factor.
- ii) Explain how it is a scale diagram.



$\frac{A}{\text{yellow}}$
 $\frac{B}{\text{yellow}}$
 $\frac{C}{\text{yellow}}$
 $\frac{D}{\text{yellow}}$

\sim	0	●
$\frac{4}{4} = 1$	$\frac{1}{1} = 1$	$\frac{3}{2} = 1.5$
$\frac{5}{4} = 1.25$	$\frac{2}{1} = 2$	$\frac{4}{2} = 2$
$\frac{6}{4} = 1.5$	$\frac{1.5}{1} = 1.5$	$\frac{3}{2} = 1.5$
$\frac{6}{4} = 1.5$	$\frac{1.5}{1} = 1.5$	$\frac{3}{2} = 1.5$

Summary... 7.1/7.2

1. Scale factor = $\frac{\text{scaled measurement [enlargement/reduction]}}{\text{original [actual]}}$

2. To find the unknown in a scaled diagram...

New ? in scaled diagram = scale factor x original
? length, height, area, perimeter....

Add page 330#10,#12 [a] graph paper