<table>
<tr><td></td><td colspan="2">2D Shapes Mark Scheme:</td><td></td></tr>
<tr><td>1</td><td colspan="2"><table><tr><th>Shape</th><th>Name</th></tr><tr><td>Shape 1</td><td>Triangle</td></tr><tr><td>Shape 2</td><td>Parallelogram</td></tr><tr><td>Shape 3</td><td>Pentagon</td></tr><tr><td>Shape 4</td><td>Rhombus</td></tr><tr><td>Shape 5</td><td>Hexagon</td></tr><tr><td>Shape 6</td><td>Trapezium</td></tr></table></td><td>[5] Mark for each correctly paired shape and name</td></tr>
<tr><td>2(a)</td><td colspan="2">6 sides hexagon</td><td>[1]</td></tr>
<tr><td>2(b)</td><td colspan="2">7 sides heptagon</td><td>[1]</td></tr>
<tr><td>2(c)</td><td colspan="2">9 sides nonagon</td><td>[1]</td></tr>
<tr><td>3</td><td colspan="2">$5 \times 3 = 15m^2$ or $8 \times 3 = 24m^2$</td><td>[1] student must choose all of the first equations or all of the second equations</td></tr>
<tr><td></td><td colspan="2">$5 \times 3 = 15m^2$ or $2 \times 3 = 6m^2$</td><td>[1] student must choose all of the first equations or all of the second equations</td></tr>
<tr><td></td><td colspan="2">$15m^2 + 15m^2 = \mathbf{30m^2}$or $24\text{m}^2 + 6\text{m}^2 = \mathbf{30m^2}$</td><td>[1] student must choose all of the first equations or all of the second equations</td></tr>
<tr><td>4</td><td colspan="2">Identify that the area of a parallelogram is $b \times h$</td><td>[1] Correct formula</td></tr>
<tr><td></td><td colspan="2">$22 \times 45 = 990\ cm^2$</td><td>[1] Working out could be shown here but it is not necessary.</td></tr>
<tr><td>5(a)</td><td colspan="2">$\frac{1}{2}(a+b)h$</td><td>[1] Or identifies a correct equation/method for area of a trapezium</td></tr>
<tr><td></td><td colspan="2">$\frac{1}{2}(9+13) \times 3$</td><td>[1] Correct calculation</td></tr>
<tr><td></td><td colspan="2">$33\ m^2$</td><td>[1] Final answer</td></tr>
<tr><td>5(b)</td><td colspan="2">$33m^2 + 33m^2 = 66m^2$</td><td>[1] Sum of cost per warehouse flor</td></tr>
<tr><td></td><td colspan="2">66×25 = £1650</td><td>[1] Total cost</td></tr>
<tr><td>6(a)</td><td colspan="2">D, this is the only net where a cube with a lid is properly formed</td><td>[1] Valid explanation</td></tr>
<tr><td>6(b)</td><td colspan="2">A & B have too many faces</td><td>[1] Valid explanation</td></tr>
<tr><td></td><td colspan="2">C Would have an overlap</td><td>[1] Valid explanation</td></tr>
<tr><td>7(a)</td><td colspan="2">$P = 2(l+w)$</td><td>[1] Finding the perimeter of the field</td></tr>
<tr><td></td><td colspan="2">$P = 2(40+100)$</td><td>[1] Correct calculation</td></tr>
<tr><td></td><td colspan="2">$P = 280m$</td><td>[1] Total distance of fence required</td></tr>
<tr><td>7(b)</td><td colspan="2">280×5</td><td>[1] Distance multiplied by cost</td></tr>
<tr><td></td><td colspan="2">£1400</td><td>[1] Total cost</td></tr>
</table>

END