Read shape properties

Stage 06 | Transfer & Solve | 8 mixed items

Stage 06: Analyse a new package

Transfer & Solve

Show your working or construction on paper. State units where asked. For questions 7 and 8, explain your method. Numerical entries may be rounded to 2 decimal places.

Name: _____ Date: _____

Work on separate paper. Plot and label figures; retain compass arcs. Give a reason for items 7 and 8.

1. A closed gift box is a 3-gonal prism. A net needs one panel per face. How many panels are required?

2. A closed gift box is a 4-gonal prism. A net needs one panel per face. How many panels are required?

3. A closed gift box is a 5-gonal prism. A net needs one panel per face. How many panels are required?

4. A closed gift box is a 6-gonal prism. A net needs one panel per face. How many panels are required?

5. A prism has 16 vertices and 24 edges. Use $V - E + F = 2$ to find F.

6. A prism has 20 vertices and 30 edges. Use $V - E + F = 2$ to find F.

7. Diagnose an error. A closed gift box is a 3-gonal prism. A net needs one panel per face. How many panels are required? A learner answers “6”. Give the correct answer and identify why the proposed answer fails.

8. Explain your choice. A closed gift box is a 4-gonal prism. A net needs one panel per face. How many panels are required?

Mr. Devonish

Self-check after attempting: use the separate answer key on the skill page. Correct reasoning and a valid drawing matter as well as the final answer.