Lesson 12.1 Practice: Solids, Nets and Cross Sections

School Launch · Geometry · Unit 12: Surface Area and Volume · Worksheet A

Calculator allowed

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. A 5-sided prism (its base has 5 sides): find its number of faces, vertices and edges, and verify Euler's formula $F + V - E = 2$. EASY

2. A 4-sided prism (its base has 4 sides): find its number of faces, vertices and edges, and verify Euler's formula $F + V - E = 2$. EASY

3. A 8-sided pyramid (its base has 8 sides): find its number of faces, vertices and edges, and verify Euler's formula $F + V - E = 2$. EASY

4. A 3-sided prism (its base has 3 sides): find its number of faces, vertices and edges, and verify Euler's formula $F + V - E = 2$. MEDIUM

5. A 7-sided pyramid (its base has 7 sides): find its number of faces, vertices and edges, and verify Euler's formula $F + V - E = 2$. MEDIUM

6. A 7-sided prism (its base has 7 sides): find its number of faces, vertices and edges, and verify Euler's formula $F + V - E = 2$. MEDIUM

7. A 4-sided pyramid (its base has 4 sides): find its number of faces, vertices and edges, and verify Euler's formula $F + V - E = 2$. MEDIUM

8. A 8-sided prism (its base has 8 sides): find its number of faces, vertices and edges, and verify Euler's formula $F + V - E = 2$. HARD

9. A 9-sided pyramid (its base has 9 sides): find its number of faces, vertices and edges, and verify Euler's formula $F + V - E = 2$. HARD

10. A 10-sided pyramid (its base has 10 sides): find its number of faces, vertices and edges, and verify Euler's formula $F + V - E = 2$. HARD