Name _____ Date _____ Period _____

LESSON 5-7 · WARM-UP

Warm-Up Practice

Determine Surface Area of Prisms

THE MOVE

what this page practices

Double each matching face and add the list to a total

Faces come in matching pairs. Double one face of each pair, then add the results.

WORKED MODEL

we do this one together

Step 1	A prism has faces of 12, 12, 20, 20, 15, and 15 square units.
Step 2	The pairs are 12 and 12, 20 and 20, 15 and 15.
Step 3	Double one of each: 2 × 12 = 24, 2 × 20 = _____, 2 × 15 = _____
Step 4	Surface area = 24 + 40 + 30 = _____ square units

YOUR TURN

8 items · about 10 minutes

1. Faces: 10, 10, 18, 18, 24, 24 square units. Surface area = _____
ANSWER _____

2. Faces: 8, 8, 15, 15, 21, 21 square units. Surface area = _____
ANSWER _____

3. Face areas 12, 30, and 20 square cm, each with a matching pair. Surface area = _____
ANSWER _____

4. A prism 5 m by 4 m by 3 m has faces of 20, 15, and 12 square meters. Surface area = _____
ANSWER _____

5. A cube has 6 identical faces, each 16 square inches. Surface area = _____
ANSWER _____

6. A triangular prism has two triangles of 6 square feet and rectangles of 20, 24, and 16 square feet. Surface area = _____
ANSWER _____

7. Surface area 108 square cm. Two faces are 30 square cm each, two are 12 square cm each. The last two total _____
ANSWER _____

8. A box is 6 in by 5 in by 2 in. Find each different face area, then the surface area. _____
ANSWER _____