Math 8 LG 5
SURFACE AREA

INTRODUCTION:

A skyline is a view of the outline of … Check out Chapter 5 Opener pages 160, 161 & 163.

LEARNING GUIDE EXPECTATIONS:

On the completion of this learning guide you will be able to:
1) label and draw views of 3-D objects.
2) draw and build nets for 3-D objects.
3) calculate the surface area for prisms.
4) calculate the surface area for cylinders.

EVALUATION:

You are ready to progress to the next learning guide when you can demonstrate your understanding of the above expectations. Please refer to your Mathematics 8 Marks Record Sheet to determine the assessment.

RESOURCES NEEDED:

Math Links 8 Text

THSS Math 8 Learning Guides and Math 8 Journal Entries Package

LEARNING ACTIVITIES:

Expectation #1: Label and draw views of 3-D objects.

1. [Watch and take notes on instructional video on Drawing Views from 3-D Objects.](#)

2. [Watch and take notes on instructional video on Drawing 3-D Objects from Views.](#)

3. In the Math Links 8 text, complete Explore the Math activity on Chapter 5 Section 5.1 pages 164-165.

4. In the Math Links 8 text, work through Example 1 on Chapter 5 Section 5.1 pages 165. Now complete Chapter 5 Section 5.1 #3, 4 on page 168 & #8, 9 on page 169.

5. In the Math Links 8 text, work through Example 2 on Chapter 5 Section 5.1 page 166. Now complete Chapter 5 Section 5.1 #5 on page 169.

6. In the Math Links 8 text, work through Example 3 on Chapter 5 Section 5.1 page 167. Now complete Chapter 5 Section 5.1 #6, 7 on page 169.

7. Read Key Ideas on Chapter 5 Section 5.1 page 168. In your math journal, complete the journal entry for LG5 Expectation 1.

Expectation #2: Draw and build nets for 3-D objects.

1. [Watch and take notes on instructional video on Drawing Views from 3-D Objects.](#)

2. In the Math Links 8 text, work through Example 1 on Chapter 5 Section 5.2 page 171. Now complete Chapter 5 Section 5.2 #3, 4, 5, 9 on pages 173-74.

3. In the Math Links 8 text, work through Example 2 on Chapter 5 Section 5.2 page 172. Now complete Chapter 5 Section 5.2 #6, 7, 8, 10 on pages 174-75.

4. Read Key Ideas on Chapter 5 Section 5.2 page 173. In your math journal, complete the journal entry for LG5 Expectation 2.

Expectation #3: Calculate the surface area for prisms.

1. [Watch and take notes on instructional video on Surface Area of Prisms.](#)

2. In the Math Links 8 text, work through Example 1 on Chapter 5 Section 5.3 page 177. Now complete Chapter 5 Section 5.3 #3, 4,13, 16 on pages 180-81.

3. In the Math Links 8 text, work through Example 2 on Chapter 5 Section 5.3 pages 178-79. Now complete Chapter 5 Section 5.3 #5, 6, 8, 11, 12 on pages 180-81.

4. Read Key Ideas on Chapter 5 Section 5.3 page 179. In your math journal, complete the journal entry for LG5 Expectation 3.

Expectation #4: Calculate the surface area for cylinders.

1. [Watch and take notes on instructional video on Surface Area of Cylinders.](#)

2. In the Math Links 8 text, work through Example 1 & 2 on Chapter 5 Section 5.4 pages 183-85. Now complete Chapter 5 Section 5.4 #3, 4, 5, 6, 7, 8, 9, 10 on pages 186-87.

3. Read Key Ideas on Chapter 5 Section 5.4 page 186. In your math journal, complete the journal entry for LG5 Expectation 4.

REVIEW AND CHALLENGE

1. In the Math Links 8 text, complete Chapter 5 Review page 188 #7,8, 9, 10, 11, 12, 13-15,17,19.