Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_

Class/Home worksheet: Alg2H

Factoring : Perfect cubes + Grouping + Solving Equations

(page 224 and beyond)

|  |  |
| --- | --- |
| Perfect Cubes (P. 224)  SOAP : Same , Opposite , Always-Positive (Adin rule) | |
| Factor: | Factor: |
| Factor: | Factor: |

|  |  |
| --- | --- |
| Factor by grouping : When you have polynomial with 4 or more terms. | |
| Factor: | Factor: |
| Factor:  (hint: Reorder) | Factor (page 223, prob 55): |

|  |  |
| --- | --- |
| Factor | |
| Factor (page 223, prob 68):  (hint: Don't stop) | Factor (page 223, prob 56): |
| Factor (page 223, prob 48):  (Challenging) | Factor (page 223, prob 74):  (Challenging) |

**Solving by factoring (principle of zero product)**

**Question 1**

what is x?

Answer:

**Question 2**

The square of a number equals one less than twice the number. find the number.

Answer:

**Question 3** (Question 1, page 234)

A house has a square living room. In remodeling, one wall is moved 3 meters to extend the room into a rectangular shape, with a resulting area of 180 .

What are the dimensions of the square room?

Answer: