

Daily Dilemma # 5: Answer Key

1. $22 - 4 = 18$ shells for Katelyn

• $6 = 18$ so Devin has 3 shells

2. Let $a =$ age of panda

$$2(a + 7) = 22$$

$$\text{So, } a + 7 = 11 \text{ and}$$

$$a = 4$$

- 3.

Turns of handle	4	8	12	16	20	24	28	32
Depth of bucket	3	6	9	12	15	19	21	24

When the handle turns 4 times, the bucket drops 3 feet.

4. 4 cubes

$$4 + 6 = 10 \text{ cones}$$

$$4(10) = 40 \text{ spheres}$$

So there are $4 + 10 + 40 = 54$ blocks

- 5.

Layers	Bricks
1	8
2	16
3	24
4	32
9	72
n	$8 \cdot n$

Every time a layer is added, the total number of bricks increases by 8