

Independent Practice

Fill in each \bigcirc with $<$, $>$, or $=$ to make a true statement. (Example 1)

1. $-2 \bigcirc -4$

2. $1 \bigcirc -3$

3. $5 \bigcirc 0$

4. Iman is building a house. The basement floor is at -15 feet. The roof of the house is above the ground 25 feet. Write an inequality to compare the heights. Explain the meaning of the inequality. (Example 2)

5. The low temperature in Albiqaa, Lebanon, one day was -9°F . On the same day, the low temperature in Byblos, Lebanon, was 26°F . Write an inequality to compare the temperatures. Explain the meaning of the inequality. (Example 2)

Order each set of integers from least to greatest. (Example 3)

- 6.
- $\{15, 17, 21, 6, 3\}$

- 7.
- $\{-55, 143, 18, -79, 44, 101\}$

8. The table indicates Zaid's cell phone use over the last four months. Positive values indicate the number of minutes he went over his allotted time, and negative values indicate the number of minutes he was under. Arrange the months from least to most minutes used. (Example 4)

| Month | Time (min) |
|----------|------------|
| February | -156 |
| March | 12 |
| April | 0 |
| May | -45 |

9. **MP Use Math Tools** Refer to the table and the following information. The apparent magnitude of an object measures how bright the object appears to the human eye. A negative magnitude identifies a brighter object than a positive magnitude.

- a. Which object appears the brightest to the human eye?

- b. Order the objects from the brightest to the faintest.

- c. Find the least apparent magnitude of this data set.

| Object | Approximate Apparent Magnitude |
|------------------|--------------------------------|
| 100-Watt Bulb | -19 |
| Alpha Centauri | 4 |
| Andromeda Galaxy | 0 |
| Full Moon | -13 |
| Sun | -27 |
| Venus | -5 |