## Chapter 1 Real Numbers

### Lesson 1-6 Scientific Notation
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**7** **The areas of the world's oceans are listed in the table. Order the oceans according to their area from least to greatest.**

| World's Oceans | |
|---|---|
| **Ocean** | **Area ($mi^2$)** |
| Atlantic | $2.96 \times 10^7$ |
| Arctic | $5.43 \times 10^6$ |
| Indian | $2.65 \times 10^7$ |
| Pacific | $6 \times 10^7$ |
| Southern | $7.85 \times 10^6$ |

Rewrite each of the areas to the same power of 10. Then compare the areas.

| Ocean | Area ($mi^2$) |
|---|---|
| Atlantic | $29.6 \times 10^6$ |
| Arctic | $5.43 \times 10^6$ |
| Indian | $26.5 \times 10^6$ |
| Pacific | $60.0 \times 10^6$ |
| Southern | $7.85 \times 10^6$ |

Since $5.43 < 7.85 < 26.5 < 29.6 < 60.0$, the oceans in order from least to greatest area are Arctic, Southern, Indian, Atlantic, and Pacific.

**11** **Fill in the ◯ with <, >, or = to make $6.25 \times 10^3$ ◯ $6.3 \times 10^3$ a true statement.**

Rewrite each of the numbers in standard form to compare them.

$6.25 \times 10^3 = 6{,}250$ Move the decimal point 3 places to the right.
$6.3 \times 10^3 = 6{,}300$ Move the decimal point 3 places to the right.

Since $6,250 < 6,300$, $6.25 \times 10^3 < 6.3 \times 10^3$.