## Lesson 6 Practice Problems

1. Write a sentence to answer each question:
a. How much warmer is 82 than 40 ?
b. How much warmer is 82 than -40 ?
2. a. What is the difference in height between 30 m up a cliff and 87 m up a cliff? What is the distance between these positions?
b. What is the difference in height between an albatross flying at 100 m above the surface of the ocean and a shark swimming 30 m below the surface? What is the distance between them if the shark is right below the albatross?
3. A company produces screens of different sizes. Based on the table, could there be a relationship between the number of pixels and the area of the screen? If so, write an equation representing the relationship. If not, explain your reasoning.

| square inches of screen | number of pixels |
| :---: | :---: |
| 6 | 31,104 |
| 72 | 373,248 |
| 105 | 544,320 |
| 300 | $1,555,200$ |

(From Unit 2, Lesson 8.)
4. Find each difference.
$\circ(-5)-6$

- $\frac{2}{5}-\frac{3}{5}$
- $35-(-8)$
- $-4 \frac{3}{8}-\left(-1 \frac{1}{4}\right)$

5. A family goes to a restaurant. When the bill comes, this is printed at the bottom of it:

Gratuity Guide For Your Convenience:
$15 \%$ would be $\$ 4.89$
$18 \%$ would be $\$ 5.87$
$20 \%$ would be $\$ 6.52$

How much was the price of the meal? Explain your reasoning.
(From Unit 4, Lesson 10.)
6. Which is a scaled copy of Polygon A? Identify a pair of corresponding sides and a pair of corresponding angles. Compare the areas of the scaled copies.

(From Unit 1, Lesson 2.)

