## Unit 5, Lesson 6: Subtracting Rational Numbers

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 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)
3. 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?
4. Find each difference.
a. $(-5)-6$
b. $35-(-8)$
c. $\frac{2}{5}-\frac{3}{5}$
d. $-4 \frac{3}{8}-\left(-1 \frac{1}{4}\right)$
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)

