**Classwork Station A: Right triangles**







**Classwork Station B: Rational expressions**

Simplify.

1.  2.  3. 

*(remember to factor when necessary*).

4.  5.  6. 

7.  8. 

**Classwork Station C: Volume & Surface Area**

1. What is the volume of a right rectangular prism with a base that is 3 inches by 8 inches, and having a height of 10 inches?
2. The diameter of a sphere is 18 inches. What is the volume of the sphere, to the nearest *hundredth of a cubic inch*?
3. The volume of a pyramid is 75 cubic centimeters. If the base of the pyramid measures 5 centimeters by 5 centimeters, what is the height of the pyramid?
4. A cylindrical tank is 15 meters tall and has a volume of 300π. What is the radius of the tank in simplest radical terms?

1. What is the lateral surface area of a right circular cylinder with a base 12 inches in diameter and having a height of 10 inches, *to the nearest tenth of a square inch*?

1. The paper wrapper of an ice cream cone is cone-shaped, with a side length of 5 inches. If the radius of the opening of the cone is 3 inches, what is its surface area to the nearest *hundredth of a square inch*?

**Classwork Station D: Similar triangles**



**Classwork Station E: Angle relationships**

1. The measure of angle *T* is 50°.

a. What is the measure of an angle that is complementary to angle *T*? (1 point)

b. What is the measure of an angle that is supplementary to angle *T*? (1 point)

2. In the figure, line *x* is parallel to line *y* and . Determine the measure of angle



3. Sketch and label each of the following geometric figures.

a. Adjacent supplementary anglesand *.*

b. Two intersecting lines with vertical angles 1 and 2 and vertical angles 3 and 4.

c. Name the congruent angles in the figure from part (b).

4. Write the letter of the description in front of each term.

5.



6. If ∠ *A* and ∠ *B* are complementary angles and the *m*∠*A* is twice the *m*∠*B*, find *m*∠*A* and *m*∠*B*.

7. In the given diagram the lines *x* || *y*, and  and .   
Show why *x* =35.

