

Student Name : **Gavin McRoy**Date: **11/18/2019 10:58 AM**Login Name : **GMCROY**Class Name : **MATH 1050/1051 Fall 2019**Review Questions

1. Two trains leave stations 476 miles apart at the same time and travel toward each other. One train travels at 95 miles per hour while the other travels at 75 miles per hour. How long will it take for the two trains to meet?

Do not do any rounding.

 hours

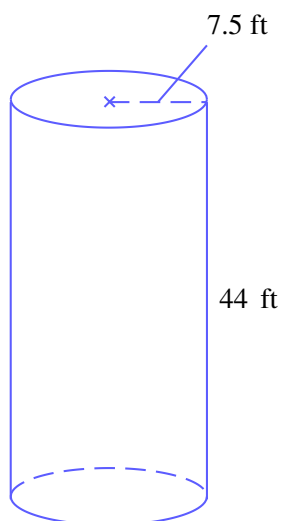
2. Factor by grouping.

$$5u^6 - 6u^4 - 35u^2 + 42$$

3. A grain silo has a cylindrical shape. Its radius is 7.5 ft, and its height is 44 ft. What is the volume of the silo?

Use the value 3.14 for π , and round your answer to the nearest whole number.

Be sure to include the correct unit in your answer.



4. Simplify the complex number i^{34} as much as possible.

5. Suppose that $\left(-\frac{\sqrt{7}}{3}, y\right)$ is a point in quadrant II lying on the unit circle.

Find y . Write the exact value, not a decimal approximation.

6. Find all x -intercepts and y -intercepts of the graph of the function.

$$f(x) = -2x^2 + 11x - 14$$

If there is more than one answer, separate them with commas.

x -intercept(s):

y -intercept(s):

7. Factor completely.

$$5x^4 + 27x^3 - 18x^2$$

8. Solve for w .

$$|2w + 4| = |2w - 6|$$

9. Solve for v , where v is a real number.

$$\sqrt[4]{6v + 15} + 4 = 7$$

10. Josh's gas tank is $\frac{1}{2}$ full. After he buys 2 gallons of gas, it is $\frac{2}{3}$ full. How many gallons can Josh's tank hold?