

PART I

You may NOT use a calculator on this part of the exam.

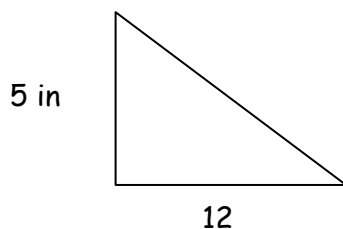
Perform each indicated operation(s):

1. $59.987 + 302.8210 + 2.07 + 9007.5$
2. $694.8201 - 72.982$
3. 347.2×70.02
4. $8692.34 \div 3.06$ (round your answer to
the nearest hundredth)
5. Round 287493.97257 to (2 points each)
 - a) the nearest thousandth _____
 - b) the nearest thousand _____
6. Consider the number 56029.3861 (2 pts each)
Identify the digit that is in the
 - a) tens place _____
 - b) tenths place _____
7. Evaluate $9^2 + \sqrt{9}$ _____
8. Solve for x: $12^2 + x^2 = 13^2$ _____

PART II

You may use a calculator on this part of the exam.

9. Given a right triangle with one leg of length 8 inches and a hypotenuse of 16 inches, find the length of the other leg.
10. Consider the following figure, and find the length of its missing side.



11. Solve each equation:

a) $6.86X - 3.3(X - 7) = 5.32 - 6.19X$

b) $4X + 6.92 = 6.7X - 3.5$

12. Write the ratio 6.3 to 0.9 as a fraction in lowest terms.

13. Write the rate 89 miles to 12 gallons as a unit rate.

14. Determine whether the following proportion is true or false.

$$\frac{2.69}{8.49} = \frac{4.15}{10.89}$$

15. Solve the following proportion:

$$\frac{16}{7} = \frac{X}{24}$$

16. 3.4 feet of wood is needed to make 1 kite. How much wood is needed to make 18 kites?

17. Which is the better buy?

32 oz of soap A for \$4.59

or 64 oz of soap B for \$8.90

18. Simplify the following expressions:

a) $6 - 1.5(6.81 - 7.88)^5 - 5.4163 + 8.9(9.2)$

b) $6.45 - 2.36(4.12) + (-1.34)^3$