

Algebra I Homework: Week of Oct 29 – Nov 2

Monday Oct 29 → Study for test tomorrow

Tuesday Oct 30 → Test today

Wednesday Oct 31 → Assembly – No homework

Thursday, Nov 1

1. If eight oranges cost \$3.12, find the cost of three oranges.
2. If 4 tickets to a show cost \$9.00, find the cost of 14 tickets.
3. A house which is assessed for \$10,000 pays \$300 in taxes. What should the tax be on a house assessed at \$15,500?
4. Maria is making pancakes for the annual pancake breakfast. She needs two cups of batter to make eight 7-inch pancakes. If Maria needs to make one thousand two hundred 7-inch pancakes, how many cups of batter does she need?
5. Solve for r:
 - a. $\frac{r}{12} - \frac{r+2}{2} = \frac{8}{3}$
 - b. $C = 2\pi r$
 - c. $0.4r - (0.8r + 3) = 7.4$
6. Find three consecutive odd integers such that twice the sum of the second and third integer results in three less than the third.
7. Perform the indicated operation and simplify:
 - a. $3\sqrt{12} - 2\sqrt{75}$
 - b. $(2\sqrt{6})(3\sqrt{3})$

Friday, Nov 2

1. Convert $6\frac{1}{3}$ feet to inches.
2. A teacher graded 180 bonus quizzes during the school year. The number of quizzes receiving A's, B's, and C's were in the ratio of 5 : 3 : 1, respectively. Find the number of bonus quizzes that received a grade of A for the school year.
3. Two angles of a triangle are in the ratio of 3 : 5. The difference of the angles is 30 degrees. Find the number of degrees in the largest angle in the triangle.
4. To get electrical power to an air compressor, 60 feet of wire is needed. A 15-meter roll of wire is to be used. Will there be a sufficient amount of wire to complete the job?
5. How many cups are in 3 gallons?
6. Four subtracted from eight times a number exceeds twice the number by 26. What is the number?
7. A tree casts a shadow of 15 feet. If a nearby man who is 6 feet tall is casting a shadow of 9 feet, how tall is the tree?
8. In a scalene triangle, the second side exceeds twice the first side by 1 inch, and the third side is four inches less than three times the first side. If the perimeter of the triangle is 24 inches, how long is each side?
9. Perform the indicated operation and simplify:
 - a. $(3x)^0 + 4x^0$
 - b. $(2x+1)^2$
 - c. $\frac{(4x^4)(8x^6)}{16x^2}$
 - d. $\frac{8x^4 - 12x^3 + 4x^2}{4x^2}$
 - e. $\frac{6x^{-3}y^4}{9x^6y^{-3}}$
 - f. $\frac{3\sqrt{2}}{4\sqrt{6}}$