

Honors Pre-Algebra Summer Work

For rising 6th graders only:

Log onto ixl.com. Complete all of the following 6th grade level lessons:

1. M (integers)
2. N (operations with integers)
3. O (mixed operations)

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For all students enrolled in Honors Pre-Algebra:

Complete the following problems. Show all of your work and be ready to discuss your solutions the first few days of school.

1. A candy bar usually sells at two for \$0.90. This week, it is on sale at three for \$1.05. Haley bought so many that she saved \$5.40 in comparison with the regular price. How many candy bars did she buy?
2. The area of a rectangular ballroom is exactly 168 meters. Both sides of the room are a whole number of meters in length. If the longer side of the room is greater than 21 meters but less than 28 meters, how long is the shorter side of the room?
3. How much money would you make in a week if you made \$5 every time the hands of the clock formed a right angle?
4. If $1\frac{1}{2}$ chickens can lay $1\frac{1}{2}$ eggs in $1\frac{1}{2}$ days, how many eggs can $3\frac{1}{2}$ chickens lay in 3 days?
5. Bob mowed the lawn 25 times last year from May to September, with 52% of this work occurring in May and June. How many times did he mow the lawn from July to September?
6. Sam recently tracked his monthly spending and found that he spends 20% of his income on rent and 15% on transportation. If \$3,250 goes to neither rent nor transportation, what is his rent each month?
7. Lucy runs a website that helps people learn programming. Every month, Lucy receives a subscription fee of \$10 from each of the subscribers to her website. Last month, the website had 100 subscribers. This month 30 new members joined the website, and 10 members cancelled their subscription. How much money will Lucy's website earn this month?
8. Of the 450 students at Northside Middle School, the ratio of boys to girls is 4:5. Of the 560 students at Eastwood Middle School, the ratio of boys to girls is 3:4.
 - a. Which middle school has more boys attending their school?
 - b. How many girls attend each school?
 - c. What is the ratio of girls attending Northside Middle School to girls attending Eastwood Middle School?

9. Suppose 35 out of 175 people play baseball and 3 out of 8 of the baseball players have their own bat. At the same rates, in a group of 800 people, predict how many you would expect to have their own bat?
10. Max is organizing a trip to the airport for a party of 75 people. He can use two types of taxis. A small taxi cost \$40 for the trip and holds up to 4 people. A large taxi cost \$63 of the trip and holds up to 7 people.
- If Max orders 6 large taxis, how many small taxis will he need? How much will the total cost be?
 - How many taxis of each type should Max order, to keep the total cost as low as possible?