Pre-Algebra CRT Study Guide

ALGEBRA Translate each phrase into an algebraic expression.

1. six times a number minus eleven
2. the product of eight hundred and a number
3. the quotient of thirty and the product of ten times a number
4. five times the sum of three and some number
5. half the distance to the school

Evaluate each expression.

1. $9 \div 3 \cdot 2 + 1$
2. $4 + 2 \cdot 8$
3. $5 + 2 \cdot 3 + 4$
4. $15 - 10 \div 2$

Evaluate each expression.

1. $|-10|$
2. $|4| + |-4|$
3. $|-6| + |-5|$
4. $|-15| - |6|$

Find each product. Write in simplest form.

1. $\frac{3}{4} \cdot \frac{2}{3}$
2. $-\frac{3}{4} \cdot \frac{10}{27}$
3. $-\frac{18}{24} \cdot \frac{3}{4}$
4. $-50 \cdot \frac{3}{1000}$

Find each quotient. Write in simplest form.

1. $\frac{1}{3} \div \frac{7}{18}$
2. $-\frac{2}{5} \div \frac{4}{25}$
3. $\frac{2}{3} \div \frac{2}{3}$
4. $\frac{4}{5} \div \left(-\frac{1}{15}\right)$

Find each sum or difference. Write in simplest form.

1. $\frac{19}{20} + \frac{1}{4}$
2. $9\frac{3}{8} + 4\frac{1}{8}$
3. $\frac{13}{15} - \frac{2}{3}$
4. $23\frac{17}{20} - 4\frac{7}{20}$

Determine whether a scatter plot of the data for the following might show a *positive*, *negative*, or *no* relationship.

1. a person's jogging speed and time spent jogging
2. the size of a family and the weekly grocery bill
3. the size of a car and the cost
4. a person's weight and percent body fat
5. time spent playing video games and time spent on outdoor activity
6. Draw a scatter plot with ten ordered pairs that shows a negative relationship.