Unit 6 Lesson 6: Write Expressions Where Letters Stand for Numbers

1 Algebra Talk: When x is 6 (Warm up)

Student Task Statement

If x is 6, what is:

$x + 4$

$7 - x$

x^2

$\frac{1}{3}x$

2 Lemonade Sales and Heights

Student Task Statement

1. Lin set up a lemonade stand. She sells the lemonade for $0.50 per cup.

   a. Complete the table to show how much money she would collect if she sold each number of cups.

lemonade sold (number of cups)	12	183	c
money collected (dollars)			

   b. How many cups did she sell if she collected $127.50? Be prepared to explain your reasoning.

2. Elena is 59 inches tall. Some other people are taller than Elena.

a. Complete the table to show the height of each person.

person	Andre	Lin	Noah
how much taller than Elena (inches)	4	$6\frac{1}{2}$	d
person's height (inches)			

b. If Noah is $64\frac{3}{4}$ inches tall, how much taller is he than Elena?

3 Building Expressions

Student Task Statement

1. Clare is 5 years older than her cousin.

   a. How old would Clare be if her cousin is:

      10 years old?

      2 years old?

      x years old?

   b. Clare is 12 years old. How old is Clare's cousin?

2. Diego has 3 times as many comic books as Han.

    a. How many comic books does Diego have if Han has:

      6 comic books?

      n books?

    b. Diego has 27 comic books. How many comic books does Han have?

3. Two fifths of the vegetables in Priya's garden are tomatoes.

    a. How many tomatoes are there if Priya's garden has:

      20 vegetables?

      x vegetables?

    b. Priya's garden has 6 tomatoes. How many total vegetables are there?

4. A school paid $31.25 for each calculator.

    a. If the school bought x calculators, how much did they pay?

    b. The school spent $500 on calculators. How many did the school buy?