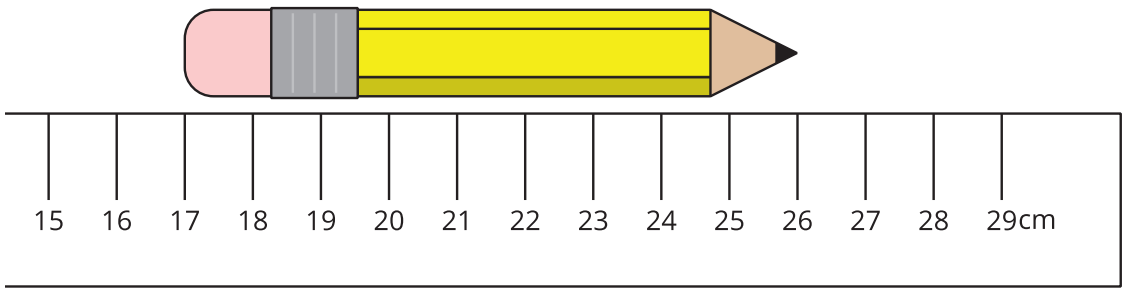
Section A: Practice Problems

1. **Pre-unit**

What is the length of the pencil in centimeters? Show your reasoning.



2. **Pre-unit**

Here are the lengths of some snakes at the pet store in inches. Use the data to create a line plot.

8	10	13	13	13
15	15	18	21	22

3. **Pre-unit**

Find the value of each sum or difference.

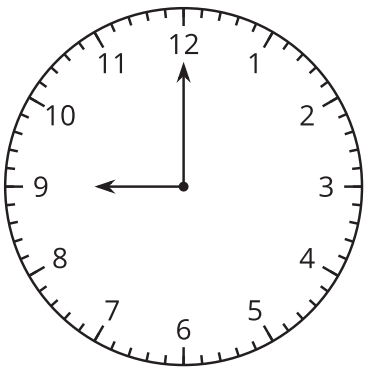
a. $374 + 455$

b. $259 - 186$

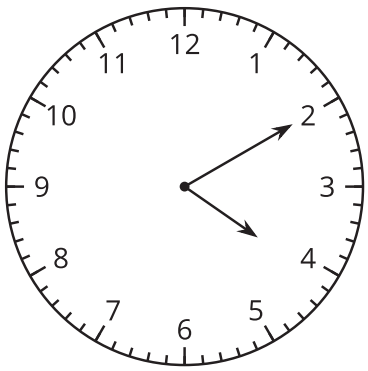
4. **Pre-unit**

Write the time shown on each clock.

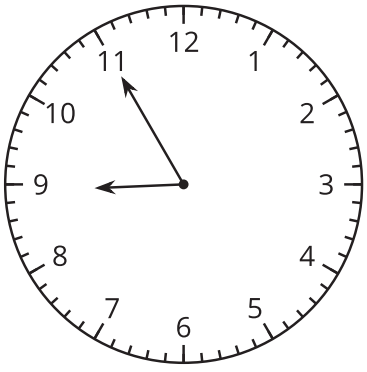
a



b



c



a. _____

b. _____

c. _____

5. **Pre-unit**

Find the value of each expression.

a. 8×9

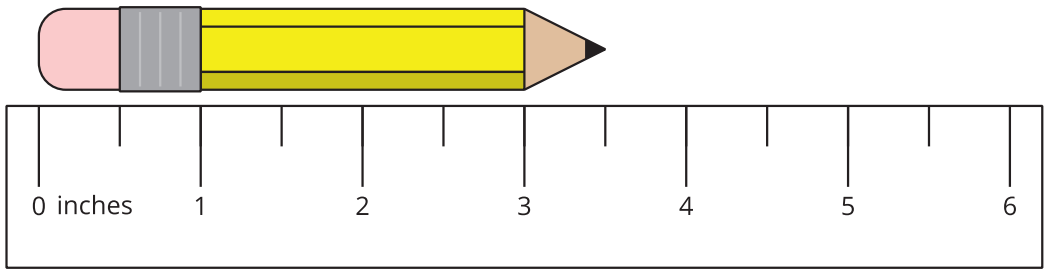
b. 16×6

c. $72 \div 8$

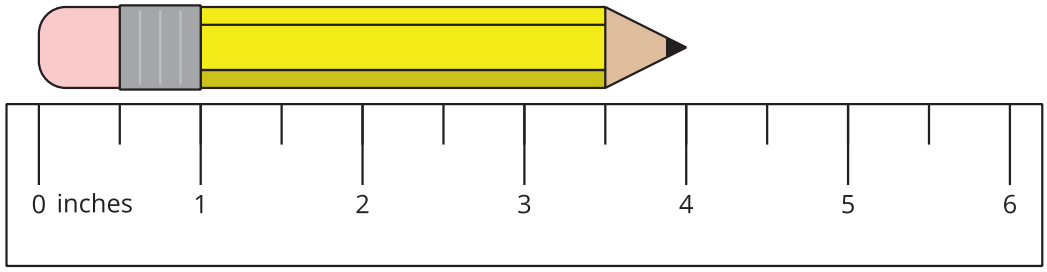
d. $92 \div 4$

6. Find the length of each pencil.

a.

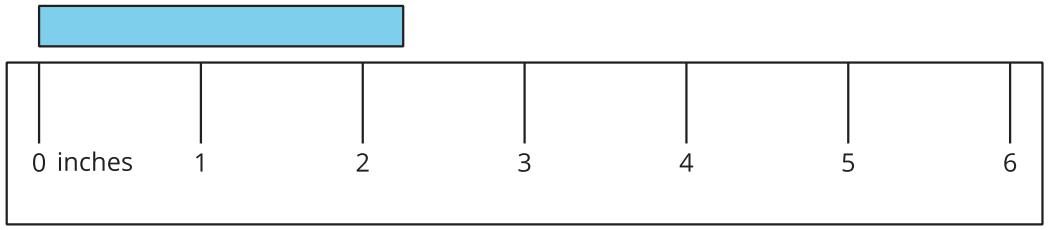


b.



(From Unit 6, Lesson 1.)

7. a. Partition the ruler into halves of an inch and then quarters of an inch.



b. What is the length of the rectangle? Explain or show your reasoning.

(From Unit 6, Lesson 2.)

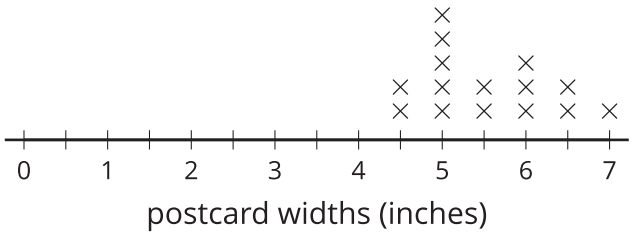
8. Here are the lengths of some pieces of pasta in inches.

Which lengths are the same? Explain or show your reasoning.

$3\frac{2}{4}$ 2 $3\frac{1}{2}$ $\frac{4}{2}$

(From Unit 6, Lesson 3.)

9. The line plot shows the width of some postcards in inches.



a. How many postcards measured $5\frac{1}{2}$ inches?

b. How many postcards measured 6 inches or more?

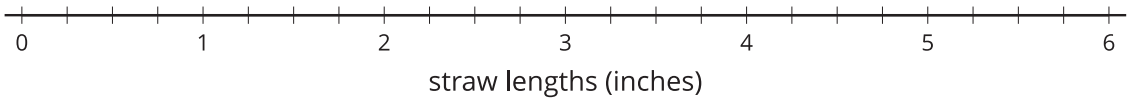
c. How many postcards were measured for the line plot?

(From Unit 6, Lesson 4.)

10. Here are the lengths of some straws in inches. Represent the data on a line plot.

$4\frac{3}{4}$ $5\frac{1}{2}$ $4\frac{1}{4}$ $5\frac{2}{4}$ $4\frac{1}{2}$ $3\frac{3}{4}$

$5\frac{1}{4}$ $4\frac{2}{4}$ 5 $4\frac{1}{4}$ $4\frac{1}{2}$



straw lengths (inches)

(From Unit 6, Lesson 5.)

11. **Exploration**

You will need a ruler marked in $\frac{1}{4}$ inches for this problem.

a. For each length, pick an object in the classroom or at home that you think will be close to that length.

- $1\frac{1}{2}$ inches
- 7 inches
- 33 inches

b. Measure each object using a ruler marked in $\frac{1}{4}$ inches. Was each estimate too high, too low, or just right?

12. **Exploration**

Choose a collection of objects to measure at school or at home. Make a line plot of the length of the objects.