STAAR®

State of Texas Assessments of Academic Readiness
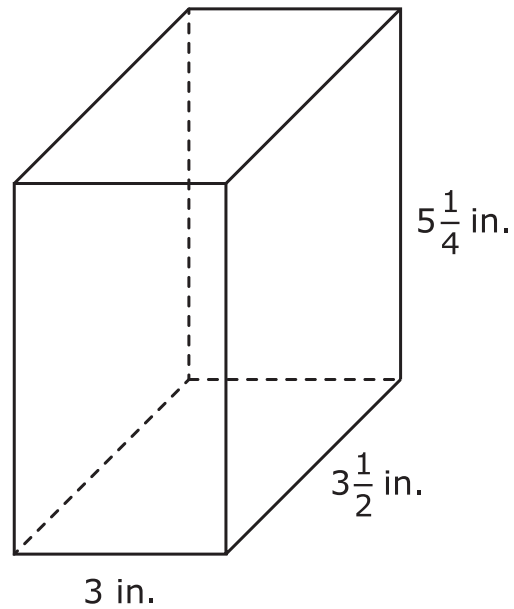
GRADE 6
Mathematics

Paper Item Sampler

1 Shaquille baked 4 times as many chocolate chip cookies as vanilla cupcakes. He baked 48 chocolate chip cookies.

Write an equation that can be used to find the number of vanilla cupcakes, x, that Shaquille baked.

Record your answer in the space provided.

2 A right rectangular prism has the dimensions shown.

$5\frac{1}{4}$ in.

$3\frac{1}{2}$ in.

3 in.

What is the volume of the prism in cubic inches?

Record your answer in the space provided.

3 On Wednesday, 72% of the customers who bought gas at a gas station made additional purchases. There were 250 customers who bought gas.

How many of these 250 customers made additional purchases?
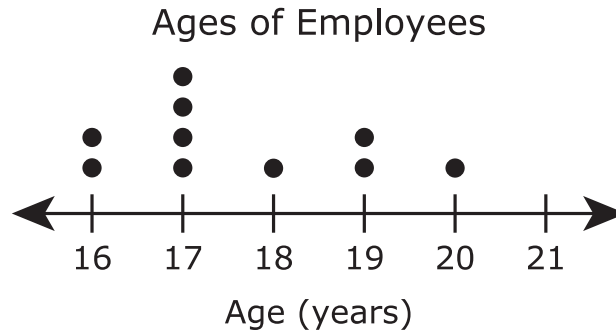
Record your answer in the space provided.

4 The list shows the numbers of hours 5 employees worked at a store.

14 23 26 40 26

What is the mean of the numbers of hours worked by the employees?

Record your answer in the space provided.

5   The dot plot shows the ages of employees at a summer camp.

Ages of Employees

Age (years)

Each ● means 1 employee.

Select **ONE** correct answer in each box to complete each sentence.

The range is [Ⓐ 4 / Ⓑ 5] years.

The median is [Ⓐ 17 / Ⓑ 18] years.

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6   Describe the relationship between *x* and *y* in the equation $y = x + 6$.

Select **ONE** correct answer in each box to complete the sentence.

The relationship is [Ⓐ additive / Ⓑ multiplicative] because the value
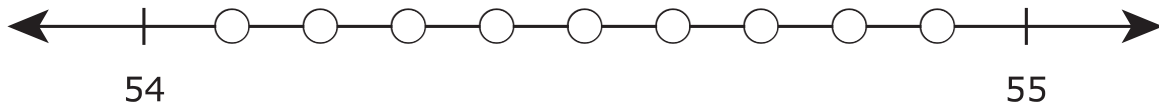
of *y* is [Ⓐ 6 times / Ⓑ 6 more than] the value of *x*.

7 Which point on the number line represents $54\frac{4}{5}$?

Shade the **ONE** correct circle that represents the point.

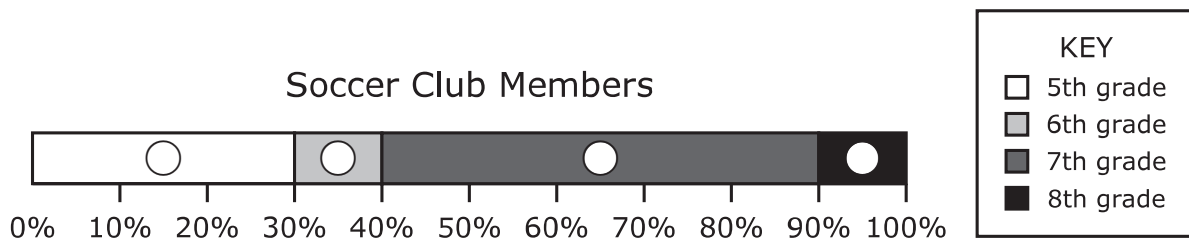54   55

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8 The table shows the number of students from each grade in a soccer club.

Soccer Club
Members

Grade	Number of Members
5th grade	15
6th grade	20
7th grade	10
8th grade	5

Which bars in the percentage bar graph correctly represent the data?

Select **TWO** correct answers.

Soccer Club Members

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

KEY
☐ 5th grade
▨ 6th grade
▧ 7th grade
■ 8th grade
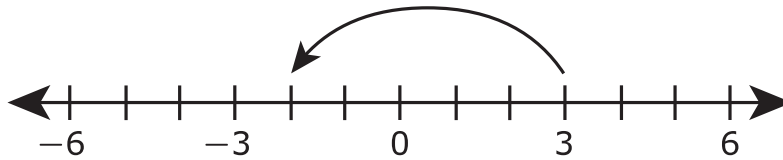
9 Two models are shown. Which expression does each model represent?

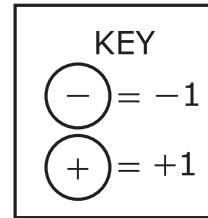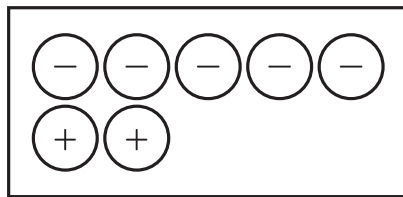Select the correct answer for each box. Not all answers will be used.

A 3 − (−5)   **B** (−5) + 2   **C** 2 − (−5)   **D** 3 + (−5)   **E** 5 − 2

Model 1

Expression: Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

Model 2

KEY

⊖ = −1

⊕ = +1

Expression: Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ

10 At the beginning of the day on February 17, Graciela had $77.25 in her checking account. Graciela recorded her transactions from that day in her check register:

- Deposited $35.00 from babysitting
- Paid $28.50 for yearbook

Complete Graciela's check register to show the balance after each transaction.

Select the correct answer for each box. Not all answers will be used.

A 13.75   **B** 42.25   **C** 70.75   **D** 83.75   **E** 112.25   **F** 140.75

Checking Account

Date	Description	Deposits (dollars)	Withdrawals (dollars)	Balance (dollars)
				77.25
2/17	Babysitting	35.00		Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ
2/17	Yearbook		28.50	Ⓐ Ⓑ Ⓒ Ⓓ Ⓔ Ⓕ

11 Anna is looking at her credit report. Identify the information Anna might see on her credit report.

Select **ONE** correct answer in each row.

Information	On Credit Report	Not on Credit Report
The balance owed on each of her credit cards	Ⓐ	Ⓑ
The date on which she paid off her car loan	Ⓐ	Ⓑ
The balance in her checking account	Ⓐ	Ⓑ

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12 Determine whether each factorization is or is not a prime factorization of 60.

Select **ONE** correct answer in each row.

Factorization	Prime	Not Prime
$4 \cdot 15$	Ⓐ	Ⓑ
$2^2 \cdot 3 \cdot 5$	Ⓐ	Ⓑ
$3 \cdot 20$	Ⓐ	Ⓑ

13 Each child in a group was asked to choose a favorite type of cereal. The table shows the number of children who chose each type of cereal.

Favorite Cereal

Type of Cereal	Number of Children
Oatmeal	15
Grits	10
Wheat porridge	2
Cold cereal	20
Other	3

Which statements are supported by the data in the table?

Select **TWO** correct answers.

○ Less than 2% of the children chose wheat porridge as their favorite type of cereal.

○ Less than 5% of the children chose "other" as their favorite type of cereal.

○ Cold cereal is associated with the mode for the favorite type of cereal.

○ Oatmeal is the favorite type of cereal for 15% of the children.

○ Grits is the favorite type of cereal for 20% of the children.

14 Which expressions are equivalent to $4(3 + 5) - 3 \times 9^2$?

Select **TWO** correct answers.

○ $12 + 20 - 243$

○ $14 \cdot 81$

○ $17 - (27)^2$

○ $4(8) - 3 \times 81$

○ $12 + 20 - 54$

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