



# **Practice Items**

# **High School**

# **Mathematics**

**Examiner's Copy**  
**and**  
**Student Materials**

Virginia Department of Education

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Item 1	<i>Option:</i>			<i>Student Response</i>
Here is an equation with the variable d. (Point to student materials.) This says six minus d equals zero. Solve for d. Six minus what number equals 0? 0, 6, or 10	A	B	C	
	0	6	10	

Item 2	<i>Option:</i>			<i>Student Response</i>
Ava has 4 blocks. (Point to student materials.) She gives half of her blocks to Isaac. How many blocks does Ava have left? 4 minus 2 equals 2, 4 minus 0 equals 4, or 6 minus 2 equals 4	A	B	C	
	$4 - 2 = 2$	$4 - 0 = 4$	$6 - 2 = 4$	

Item 3	<i>Option:</i>			<i>Student Response</i>
Here is a number to the first power. (Point to student materials.) A number to the first power equals itself. What is 15 to the first power? 1, 15, or 20	A	B	C	
	1	15	20	

Item 4	<i>Option:</i>			<i>Student Response</i>
Here are some dollar bills. (Point to student materials.) Paula has two dollars. She gets two more dollars for recycling cans and another two dollars for sweeping floors. Which equation shows how much money Paula has altogether? 2 plus 3 plus 5 equals 10, 2 plus 2 plus 2 equals 6, or 2 plus 2 plus 3 equals 7	A	B	C	
	$2 + 3 + 5 = 10$	$2 + 2 + 2 = 6$	$2 + 2 + 3 = 7$	

Item 5	<i>Option:</i>			<i>Student Response</i>
Here is an equation with the variable y. (Point to student materials.) This says 3 times y equals 12. Solve for y. What number times 3 equals 12? 3, 4, or 10	A	B	C	
	3	4	10	

Item 6

Option:

Here is a line graph showing the relationship between the number of ice cream sales and temperature outside. (Point to student materials.) Does the line show that hotter days have more ice cream sales, fewer ice cream sales, or the same ice cream sales? more, fewer, or same

A	B	C	Student Response
more	fewer	same	

Item 7

Option:

Here is an input/output table showing what happens to y when x equals 1, 2, 3, 4, and 5. (Point to table in student materials.) The relationship between x and y can be expressed as the function y equals 10 times x. (Point to function in student materials.) What is the value for Y when X equals 3? 10, 20, or 30

A	B	C	Student Response
10	20	30	

Item 8

Option:

Shawn has money to buy a gift. (Point to student materials.) Shawn has two twenty-dollar bills, a 10 dollar bill, a 1 dollar bill, and 2 quarters. How much money does Shawn have altogether? \$31.50, \$51.00, or \$51.50

A	B	C	Student Response
\$31.50	\$51.00	\$51.50	

Item 9

Option:

Here are three clocks for you to read. (Point to student materials.) The toy store opens at 10:00 AM and closes 7 hours later. Which clock shows the time the toy store closes? (Do not read answer choices) A, B or C

A	B	C	Student Response
12:00 PM	5:00 PM	7:00 PM	

Item 10

Option:

Here is a number line with an open circle point at negative 2. (Point to student materials.) If an arrow moves in a positive direction from the point at negative 2, which inequality matches the number line? x is greater than negative 2, x is less than negative 2, or x is equal to negative 2

A	B	C	Student Response
$x > -2$	$x < -2$	$x = -2$	

Item 11

Option:

Here is an equation with the variable  $y$ . (Point to student materials.) This equation says 2 times  $y$  plus 4 equals 20. Solve for  $y$ . What does  $y$  equal? 2, 4, or 8

A	B	C	Student Response
2	4	8	

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Item 12

Option:

Here is 5 to the second power. (Point to student materials.) When a number is raised to the second power, it is multiplied by itself. What is 5 to the second power? 5, 10, or 25

A	B	C	Student Response
5	10	25	

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Item 13

Option:

Jackson is buying a video game. (Point to student materials) The game costs \$25.00 and the total sales tax is 7% or \$1.75. How much money does Jackson need to buy the game? \$26.75, \$32.00, or \$33.75

A	B	C	Student Response
\$26.75	\$32.00	\$33.75	

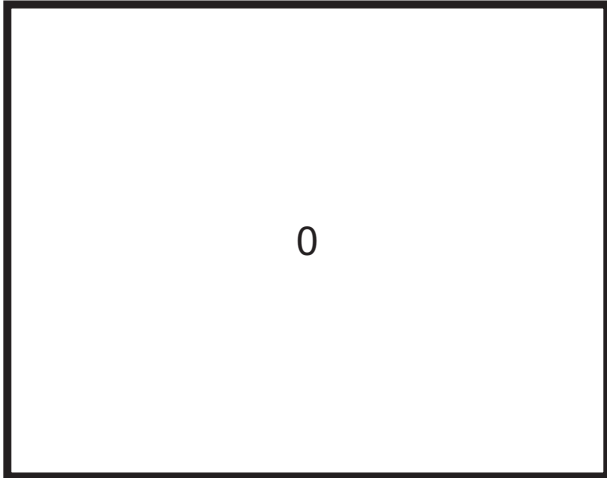
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Item 1

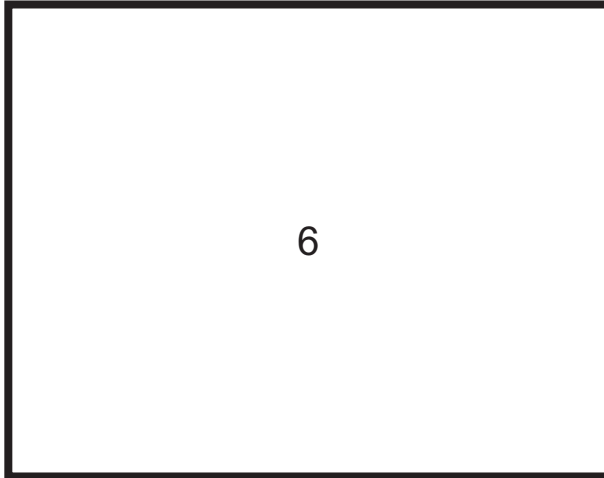
$$6 - d = 0$$

Solve for d.

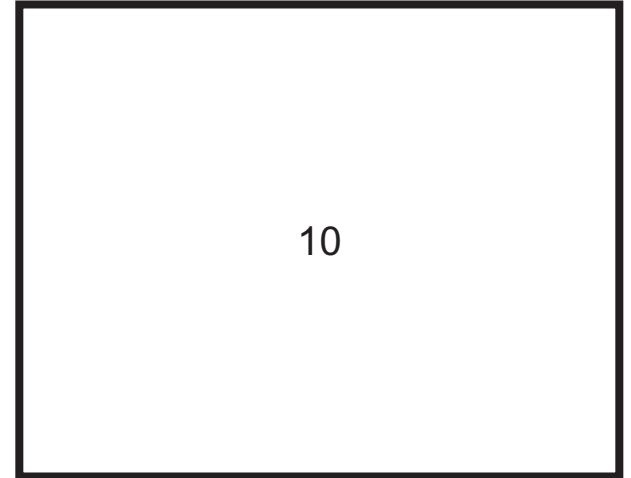
Six minus what number equals 0 ?



**A**

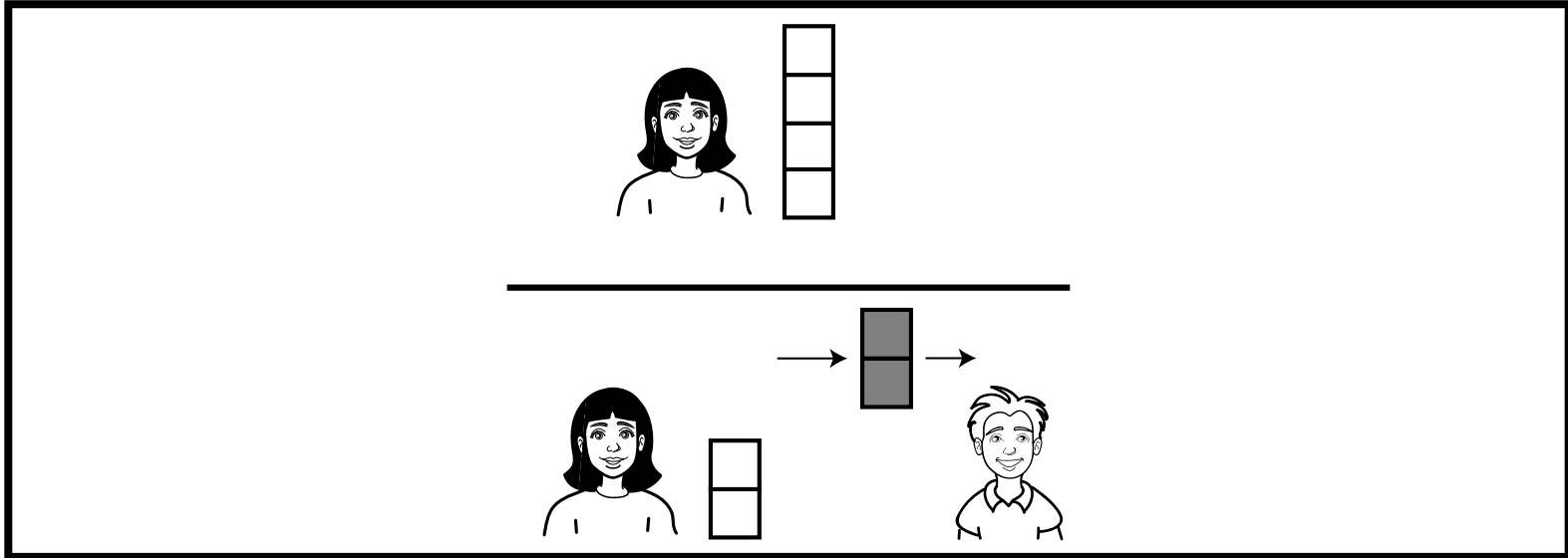


**B**



**C**

Item 2



How many blocks does Ava have left?

$$4 - 2 = 2$$

**A**

$$4 - 0 = 4$$

**B**

$$6 - 2 = 4$$

**C**

## Item 3

$$15^1 = \underline{\quad ? \quad}$$

A number to the first power equals itself.

What is 15 to the first power?

1

**A**

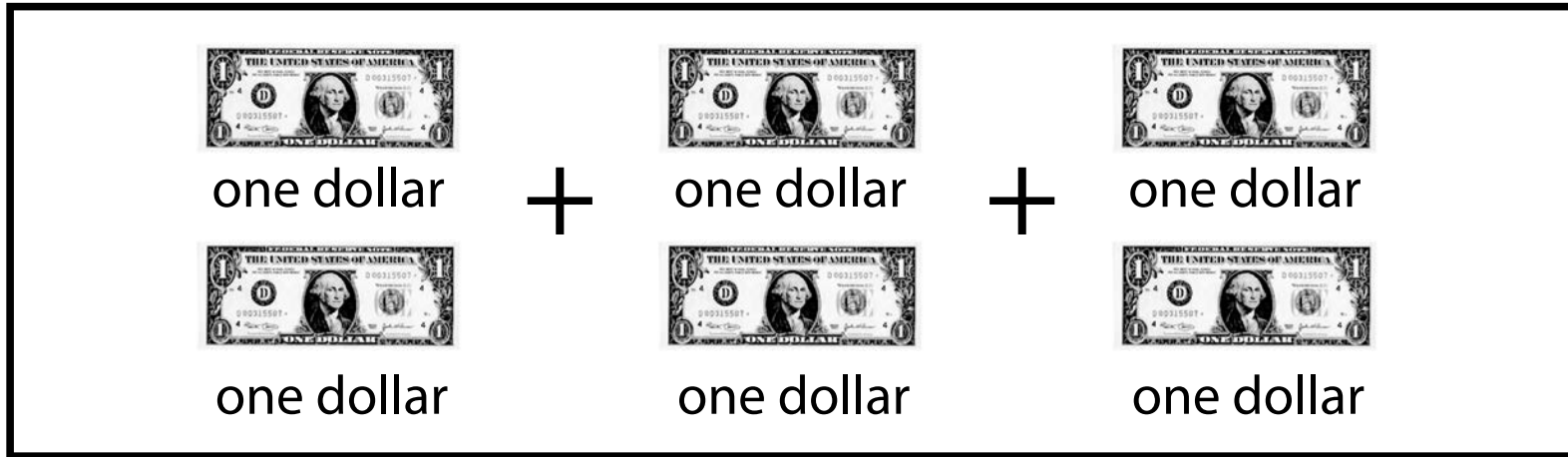
15

**B**

20

**C**

## Item 4



Paula has two dollars. She gets two more dollars for recycling cans and another two dollars for sweeping floors.

Which equation shows how much money Paula has altogether?

$$2 + 3 + 5 = 10$$

**A**

$$2 + 2 + 2 = 6$$

**B**

$$2 + 2 + 3 = 7$$

**C**



Item 5

$$3y = 12$$

Solve for y.

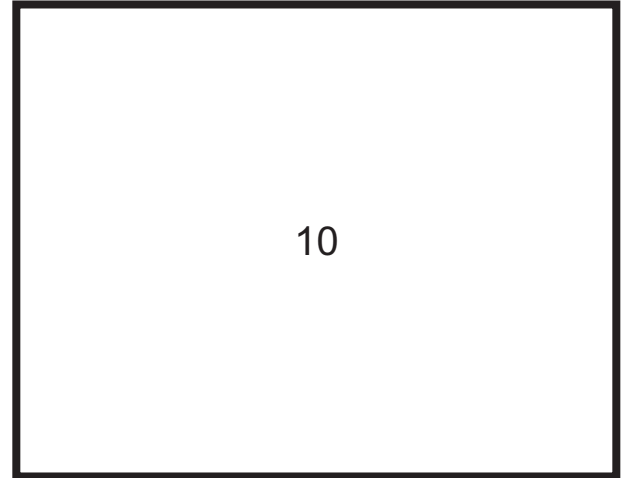
What number times 3 equals 12 ?

A rectangular box with a black border, containing the number 3 in the center.

**A**

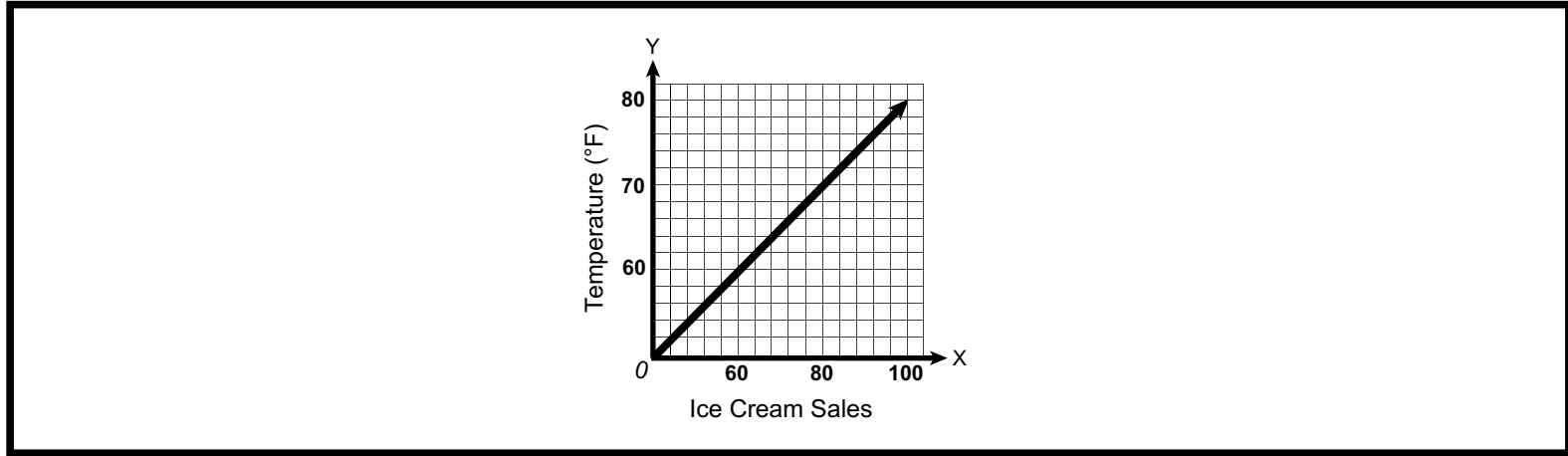
A rectangular box with a black border, containing the number 4 in the center.

**B**

A rectangular box with a black border, containing the number 10 in the center.

**C**

Item 6



Does the line show that hotter days have more ice cream sales, fewer ice cream sales, or the same ice cream sales?

more

**A**

fewer

**B**

same

**C**

## Item 7

<b>x</b>	<b>y</b>
1	10
2	20
3	—
4	40
5	50

$y = 10x$

What is the value for  $y$  when  $x = 3$  ?

10

**A**

20

**B**

30

**C**

Item 8

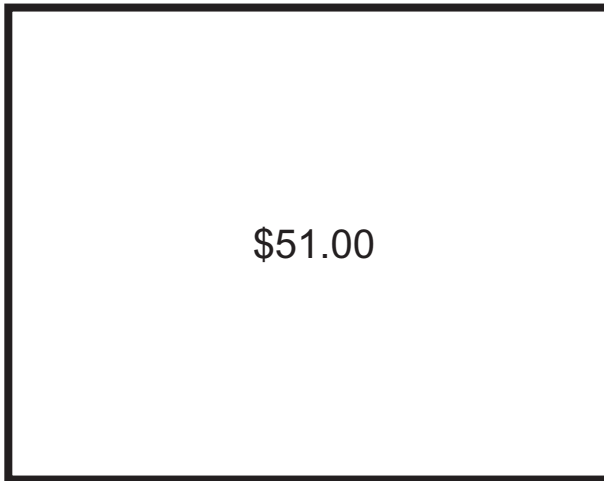


Shawn has two twenty dollar bills, a 10 dollar bill, a 1 dollar bill, and 2 quarters.

How much money does Shawn have altogether?



A



B

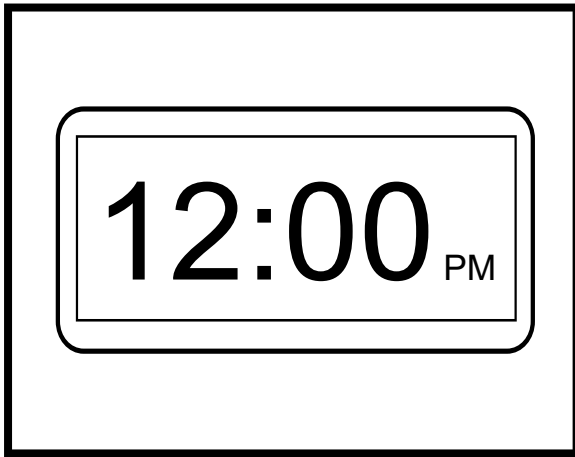


C

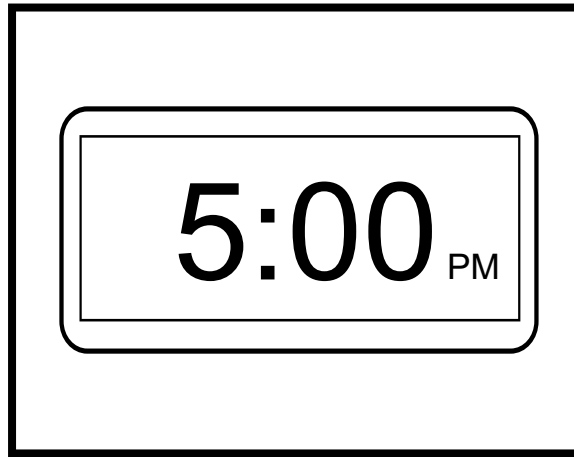
Item 9

The toy store opens at 10:00 am and closes 7 hours later.

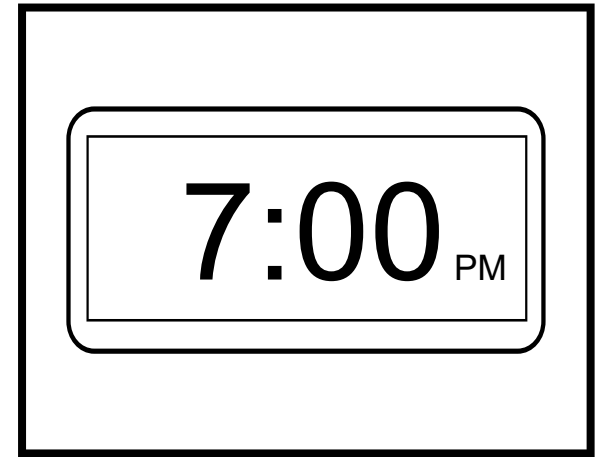
Which clock shows the time the toy store closes?



A

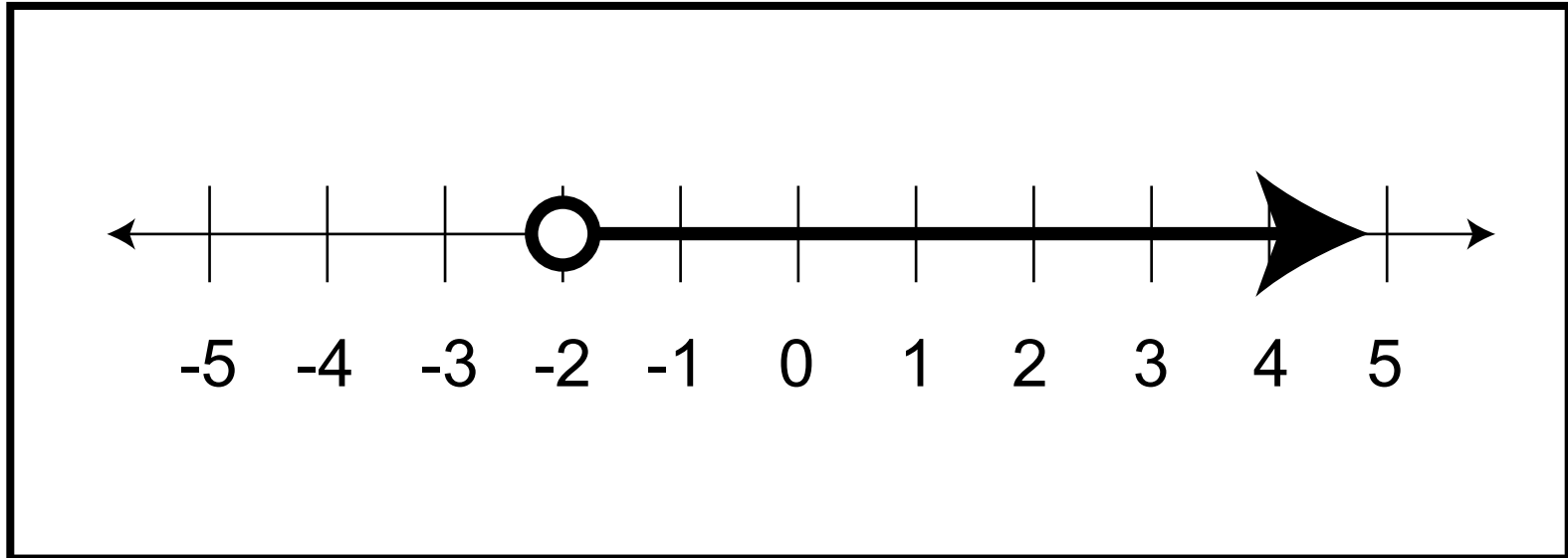


B



C

## Item 10



If an arrow moves in a positive direction from the point at  $-2$ , which inequality matches the number line?

$$x > -2$$

**A**

$$x < -2$$

**B**

$$x = -2$$

**C**

Item 11

$$2y + 4 = 20$$

Solve for y.


What does y equal?

A rectangular box with a black border, containing the number 2 in the center.

**A**

A rectangular box with a black border, containing the number 4 in the center.

**B**


A rectangular box with a black border, containing the number 8 in the center.

**C**

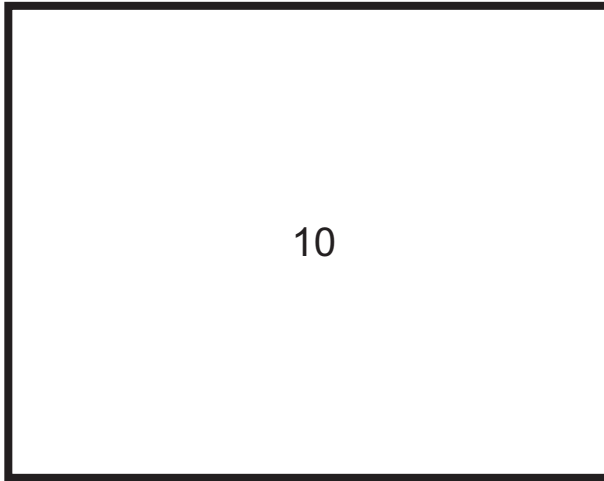
Item 12

$$5^2 = \underline{\hspace{2cm}}$$

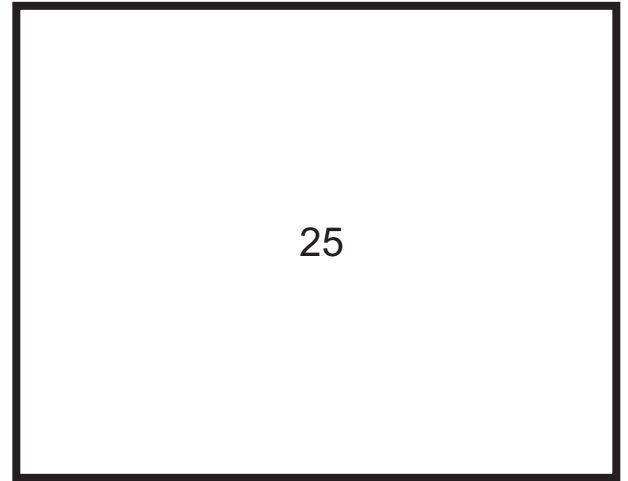
What is 5 to the second power?



**A**



**B**



**C**



## Item 13

Video game = \$25.00

Sales Tax = 7% = \$1.75

The game costs \$25.00 and the total sales tax is 7% or \$1.75.

How much money does Jackson need to buy the game?

\$26.75

A

\$32.00

B

\$33.75

C

