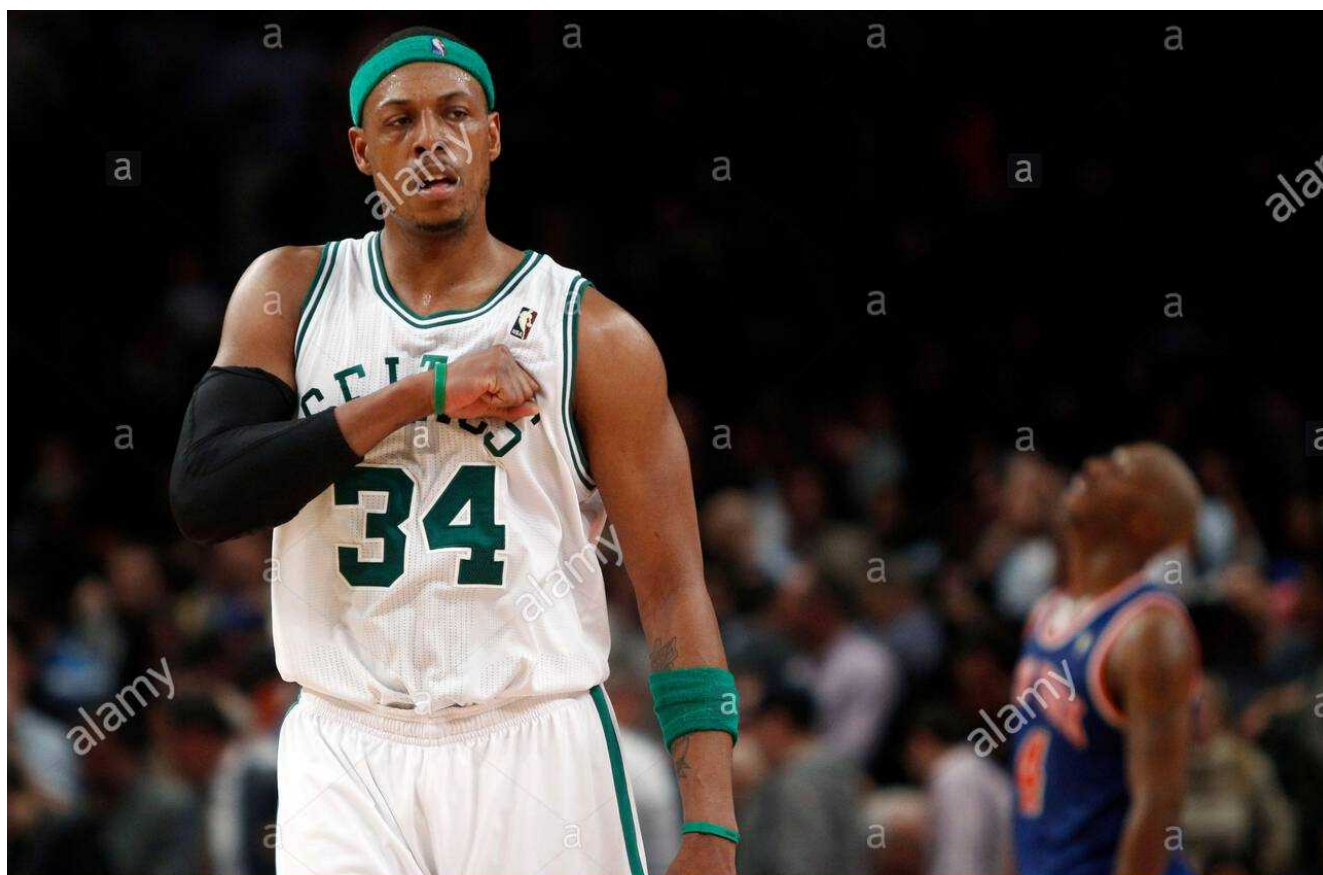You can do this!!!

a alamy stock photo

You can do this!!!

EOC Online Practice   4/26/2021

1. Go to the website "Welcome to Experience Online Testing Georgia" (http://gaexperienceonline.com/).

2. Select "Test Practice."

3. Under "End-of-Course (EOC) All Assessments," select "Online Tools Training."

4. Select "EOC Test Practice."

5. Select "Technology Enhanced Items."

6. You will be taken to a login screen. Use the username and password provided on the screen to log in

and practice navigating technology-enhanced items online.

Note!!!

1. Only use Google Chrome

2. A constructed-response item is worth two points.

3. Partial credit may be awarded if part of the response is correct.

4. An extended constructed-response item is worth four points.

5. Partial credit may be awarded if part of the response is correct.

High School Test Practice

Question 11

A table of values is shown.

$y = mx + b$ $m = \dfrac{5-3}{3-0} = \dfrac{2}{3}$

$b = 3$

x	y
0	3
3	5
6	7
9	9

$y = \dfrac{2}{3}x + b$

Create a linear equation that represents the values shown in the table.

$y = 2/3X + 3$

1	2	3		x	y		+	−	•	÷
4	5	6					<	≤	=	≥	>
7	8	9					$\frac{\square}{\square}$	$\square^{\square}$	(□)
0	.	(⁻)

Review/End Test   Pause   Flag   Options

High School Test Practice   **Training Student**

Question 12

Ted leaves home at 6:20 A.M. to drive 368 miles to visit his grandmother.

Assuming he does not stop and drives an average of 50 miles per hour, APPROXIMATELY what time will he arrive at his destination?

(a) 2:00 P.M. ✓

(b) 2:30 P.M.

(c) 3:00 P.M.

(d) 3:30 P.M.

$$\frac{368}{50} = 7.36$$
$$+ \ 6.20$$
$$13.56$$

$$= 1\!:\!56 \, pm \approx 2pm$$

High School Test Practice

Question 13
Page 1 of 2

Luis is looking at two rectangles with side lengths given as algebraic expressions.

Part A

The area of the first rectangle is $x^2 + 6x$.

Which could be the length and width of the rectangle?

(a) Length: x, Width: $x + 6$

(b) Length: x, Width: $x^2 + 6$

(c) Length: x^2, Width: $6x$

(d) Length: $2x$, Width: 3

factor using GCF

$$x^2 + 6x$$

$$GCF = x$$

$$x(x + 6)$$

High School Test Practice

Question 13
Page 2 of 2

Luis is looking at two rectangles with side lengths given as algebraic expressions.

Part B

The area of the second rectangle is $x^2 + 7x + 12$.

What is the sum of the areas of the two rectangles?

$$x^2 + 7x + 12$$
$$+ x^2 + 6x + 0$$
$$\overline{2x^2 + 13x + 12}$$

(a) $x^2 + 7x + 18$

(b) $2x^2 + 13x + 12$ ✓

(c) $2x^2 + 25x$

(d) $2x^2 + 7x + 12$

High School Test Practice

Question 14 ▼

The set of ordered pairs shown represents a function *f*.

$$\{(-5, 3), (4, 9), (3, -2), (0, 6)\}$$

Select THREE ordered pairs that could be added to the set so that *f* remains a function.

Ⓐ (−3, −2)

Ⓑ (4, 0)

Ⓒ (0, −1)

Ⓓ (1, 6)

Ⓔ (2, 3)

Ⓕ (−5, 9)

Remember, for it to be a function, the x values cannot repeat!
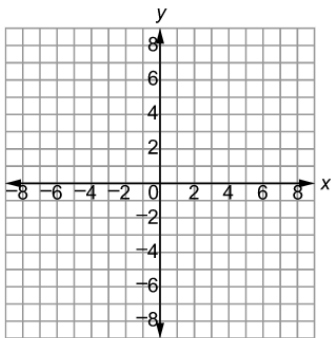
High School Test Practice   **Training Student**

Paul is using a coordinate grid to help him plan where lines will be painted on a gym floor. He draws a line with the equation $f(x) = 3x + 6$ to represent a painted blue line.

The coordinate grid is to help you picture the equation $f(x)$. You will not be given any points for work shown on the coordinate grid.

Part A

Paul draws another line to represent a second painted blue line that will be parallel to the first. The second line passes through the point (0, 3).

What is the slope of the second line that Paul drew?

(a) −3

(b) $-\dfrac{1}{3}$

(c) $\dfrac{1}{3}$

(d) 3 ✓

Remember, the slopes of parallel lines are equal!!!

High School Test Practice   **Training Student**

Paul is using a coordinate grid to help him plan where lines will be painted on a gym floor. He draws a line with the equation $f(x) = 3x + 6$ to represent a painted blue line.

The coordinate grid is to help you picture the equation $f(x)$. You will not be given any points for work shown on the coordinate grid.
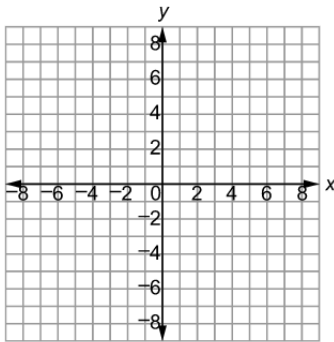
Part B

A yellow line will be painted on the gym floor. The yellow line will be perpendicular to both blue lines. On Paul's graph, the yellow line passes through the point (3, 0).

What must be the slope of the yellow line?

(a) -3

(b) $-\dfrac{1}{3}$

(c) $\dfrac{1}{3}$

(d) 3

Note: Perpendicular lines have slopes that are the opposite of the reciprocal of each other. In this case, the slope of the first line is 3. The reciprocal of 3 is 1/3, so the opposite of the reciprocal is therefore -1/3.

High School Test Practice

Question 16

Some probabilities are listed below.

P(A or B) = 0.65

P(A) = 0.5

P(B) = 0.25

What is P(A and B)?

$$P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$$

$$P(A \text{ and } B) = P(A) + P(B) - P(A \text{ or } B)$$

$$= 0.5 + 0.25 - 0.65$$

$$= 0.1$$

1	2	3	
4	5	6	
7	8	9	
0	.	(¯)	

High School Test Practice   **Training Student**

Part A   Move a value into each box to show how to convert 35 meters per second to kilometers per hour.

(1 kilometer = 1,000 meters)

(1 hour = 60 minutes)

(1 minute = 60 seconds)

$$\frac{35 \text{ meters}}{\text{second}} \cdot \frac{1 \text{ kilometer}}{1{,}000 \text{ meters}} \cdot \frac{60 \text{ seconds}}{1 \text{ minute}} \cdot \frac{60 \text{ minutes}}{1 \text{ hour}}$$

High School Test Practice   **Training Student**

Question 17
Page 2 of 2

Part B Monique is making lemonade that uses 6 teaspoons of mix to make 8 fluid ounces of lemonade. She needs to make 1 gallon of lemonade.

(1 gallon = 4 quarts)

(1 quart = 32 fluid ounces)

Move a value into each box to show how to calculate the number of cups of mix needed per gallon of lemonade.

$$\frac{6 \text{ teaspoons}}{8 \text{ fluid ounces}} \cdot \frac{32 \text{ fluid ounces}}{1 \text{ quart}} \cdot \frac{4 \text{ quarts}}{1 \text{ gallon}} \cdot \frac{1 \text{ tablespoon}}{3 \text{ teaspoons}} \cdot \frac{1 \text{ cup}}{16 \text{ tablespoons}}$$

Part A The graph of $f(x)$ is shown on the coordinate grid.

Graph the linear function $f(x) - 2$.
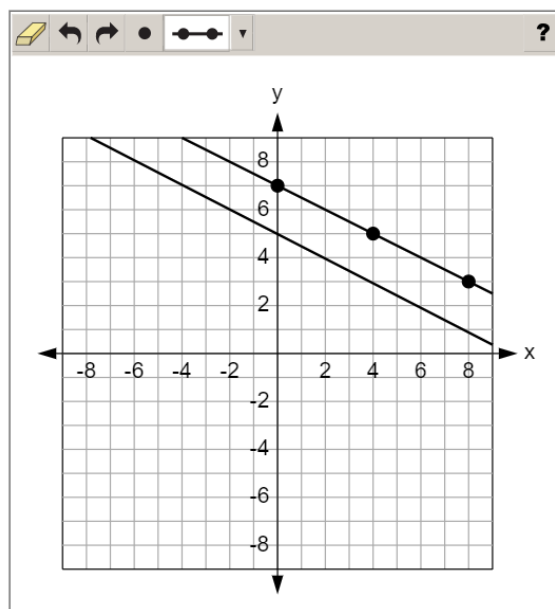
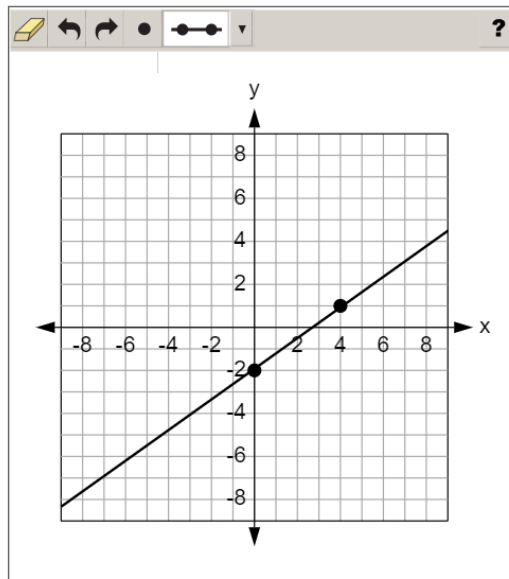High School Test Practice   **Training Student**

Question 18
Page 2 of 2

Part B   A linear function is shown.

$$g(x) = \frac{3}{4}x - 5$$

$= \frac{3}{4}x - 2$

Graph the linear function $g(x) + 3$.
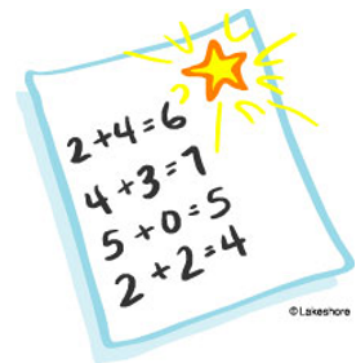
$+2$

$y\,int = -2$

ALGEBRA I

What Can I Expect on the EOC?

- **73 Total Problems**

- **Types of Questions on Test:**
  - **58** Multiple Choice,
  - 1 Technology-enhanced,
  - 2 Constructed response,
  - **11 Field test items**,
  - 1 Extended constructed response

- **Time:**
  - **Section 1**: 85 Minutes & **Section 2**: 85 Minutes

- **You can use the following provided items**
  - Calculator (Except on 1 part)
  - Formula sheet
  - Graph paper

- **Algebra 1 Domains on Test**
  - Equations---30%
  - Expressions---20%
  - Functions---35%
  - Statistics & Probability---15%

TEST-TAKING STRATEGIES

1. Read the directions carefully and completely.

2. Read each question and all the answer choices carefully.

3. If you use scratch paper, make sure you copy your work to your test accurately.

4. Underline the important parts of each problem. Use the highlighter tool.

5. Be aware of time. If a question is taking too much time, come back to it later.

6. Answer all questions. Check your answers for accuracy.

7. For constructed-response questions, do as much as you can. Remember, partially right responses will earn a partial score.

8. Stay calm and do the best you can.

Unit 1 - No Calc. Review

High School HS Algebra
ALG_PS_EOC_NO_CALC_Friday

Name:_____   Block:_____

1. The sum of $\sqrt{18}$ and $6\sqrt{2}$ is $\sqrt{18} + 6\sqrt{2}$

   A) $7\sqrt{20}$
   B) $14\sqrt{5}$
   C) $15\sqrt{2}$
   D) $9\sqrt{2}$

   $\sqrt{9 \cdot \sqrt{2}} + 6\sqrt{2}$

   $3\sqrt{2} + 6\sqrt{2}$

   $= 9\sqrt{2}$

   (factor tree)
   1 | 18
   2 | 9
   3 | 6
   18

2. The expression $\sqrt{50}$ is equivalent to

   A) $5\sqrt{2}$
   B) $25\sqrt{2}$
   C) $2\sqrt{5}$
   D) $5\sqrt{10}$

   $\sqrt{50} = \sqrt{25} \cdot \sqrt{2}$
   $5\sqrt{2}$

3. What is the solution for this system of equations?

   $$\begin{cases} x = 5 - 3y \\ 5x + 15y = 25 \end{cases}$$

   A) $(-1, 2)$
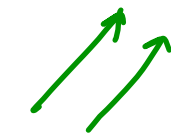   B) $(5, 0)$
   C) Infinitely Many Solutions
   D) No Solution
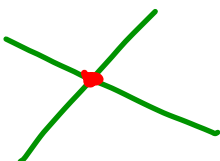
   $5(5 - 3y) + 15y = 25$

   $25 - 15y + 15y = 25$

   $25 = 25$

$3x = 3x \longrightarrow$ Many Solution

$3x = 7x \longrightarrow$ No Solution

$3x = 6 \longrightarrow$ 1 Solution

Test Taking Tips

1. Plans
   1. Work it out (show all steps)
   2. Use calculator for assistance (table, data, graphing)
   3. Elimination (guess and check)
2. Reminders
   1. You have 85 minutes with 25 and 10 minute warnings (don't leave anything blank)
   2. Use extra time to check (be super sure before you logout)
   3. You have plenty of scratch paper (ask for extra)
   4. You have two calculators
   5. You can only do your best

Unit 1 - Calc. Review
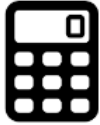
High School HS Algebra
ALG_PS_EOC_Friday

Name:_____   Block:_____

4. Enrique's dog grew 10 inches during a year, between its first visit to the vet and its one-year-checkup. Approximately how many centimeters did the dog grow per month? Use the approximate conversion $1\ in \approx 2.54\ cm$.

A) 0.8 cm/mo
B) 2.1 cm/mo
C) 25.4 cm/mo
D) 304.8 cm/mo

(handwritten: $\frac{10\,in \cdot 2.54\,cm}{1\,yr} \cdot \frac{1\,yr}{1\,in} \cdot \frac{1\,yr}{12\,mths}$ = $\frac{25.4\,cm}{12\,mth}$)

5. A mosquito can fly 75 centimeters per second. Considering 1 inch is approximately 2.54 centimeters long, how many feet can the bug travel in a minute?

A) 24
B) 38
C) 148
D) 2286

(handwritten: $\frac{75\,cm}{1\,sec} \cdot \frac{1\,in}{2.54\,cm} \cdot \frac{1\,ft}{12\,in} \cdot \frac{60\,sec}{min}$ = $\frac{4500\,ft}{30.48\,min}$ = 147.63 ft/min)

6. Which of the following expressions is equivalent to the one shown below?
$$(x-3)(2x+5)$$
A) $2x^2 - x - 15$
B) $2x^2 + 11x - 15$
C) $2x^2 - 15$
D) $2x + 2$

(handwritten box method: $2x \cdot 2x^2 = 2x^2, -6x, 5x, -15$)

7. Which sum is rational?

(handwritten: Rational # can be written as a fraction)

A) $\pi + 18$
B) $\sqrt{25} + 1.75$
C) $\sqrt{3} + 5.5$
D) $\pi + \sqrt{2}$

8. Look at the expression
$$2\sqrt{8} \cdot \sqrt{20}$$
Which of these is equivalent to this expression?

A) $2\sqrt{28}$
B) 5
C) $8\sqrt{10}$
D) $32\sqrt{10}$

(handwritten: $2\sqrt{8} \cdot \sqrt{20}$ = $2\sqrt{160}$ = $2\sqrt{16} \cdot \sqrt{10}$ = $2 \cdot 4\sqrt{10}$ = $8\sqrt{10}$; factor table 160: 1|160, 2|80, 4|40, 5|32, 8|2, 16|10)

9. A sequence is shown below.
10, 12, 14, 16, ...
Which function can be used to determine the nth number in the sequence?

A) $a_n = n + 2$
B) $a_n = 10(2)^{n-1}$
C) $a_n = 2n + 10$
D) $a_n = 2n + 8$

(handwritten: $a_n = a_1 + (n-1)d$; $d=2$, $a_1 = 10$; $a_n = 10 + (n-1)2$; $a_n = 10 + 2n - 2$; $a_n = 2n + 8$)

10. A student store sold a total of 55 shirts for $620. The shirts sold were either red or white. If the red shirts sold for $12 each and the white shirts sold for $10 each, how many red shirts were sold?

A) 35
B) 28
C) 27
D) 20

(handwritten: $-10x(r + w = 55)$; $12r + 10w = 620$; $-10r - 10w = -550$; $+(12r + 10w = 620)$; $2r = 70$; $\frac{2r}{2} = \frac{70}{2}$; $r = 35$)

11. Solve the system of equations below:
$$\begin{cases} 20x - 5y = 55 \\ 3x - 2y = 12 \end{cases}$$
A) (-3, 2)
B) (3, 1)
C) (2, -3)
D) (6, 3)

(handwritten: x,y; $(20\times2) - (5\times-3) = 55$; $(3\times2) - (2\times-3) = 12$)

12. If the value of a car over time can be modeled by the equation $y = 21000(0.88)^x$, which of the following equations are true?

(handwritten: decay factor; decay; $1 - 0.88 = 0.12$; $r = 12\%$)

A) The car was bought for $21000, and is losing 88% of its value each year.
B) The car was bought for $21000, and increasing in value by 88% each year.
C) The car was bought for $21000, and is losing 12% of its value each year.
D) The car was bought for $18480, and is losing 12% of its value each year.

13. Which of the following is a factor of the expression
$$5x^2 + 13x - 6?$$
A) 5x - 2
B) 5x + 2
C) 5x + 3
D) 5x - 3

(handwritten: $a = 5$, $b = 13$, $c = -6$; -30; 15×-2; 13; box: $5x^2, -2x, 15x, -6$; $= (5x - 2)(x + 3)$; factor table: -1|30, -2|15, -3|10)

14. Which of the following is the factored form of the function $f(x) = 9x^2 - 16$?

   A) $f(x) = (3x - 4)(3x - 4)$
   B) $f(x) = (3x + 4)(3x - 4)$
   C) $f(x) = (3x - 8)(3x - 8)$
   D) $f(x) = (3x - 8)(3x + 8)$

15. What are the intercepts of the function below?
$$g(x) = x^2 + 3x - 10$$

   A) (2, 0), (-5, 0), and (-10, 0)
   B) (-2, 0), (5, 0), and (-10, 0)
   C) (2, 0), (-5, 0), and (0, -10)
   D) (-2, 0), (5, 0), and (0, -10)

(14) $f(x) = 9x^2 - 16$

This is a difference of squares problem!

Remember: $a^2 - b^2$
$= (a+b)(a-b)$

$f(x) = 9x^2 - 16$

$a = 3x \quad b = 4$

$= (3x+4)(3x-4)$

(15) $g(x) = x^2 + 3x - 10$

The question is asking, what are the zeros, or roots, or solutions, or x-intercepts and what is the y-intercept?

The y-intercept is (0, -10)

We have to factor to get the x-intercepts

$x^2 + 3x - 10 = 0$

-10 $(x+5)(x-2) = 0$

$5 \quad -2$ $x = -5 \quad x = 2$

3

x-intercepts: $(-5, 0) \propto (2, 0)$