

Digital Breakout Chapter 8 Review

Name: KEY

Period: _____

Clue # 1	Click on the app created by Daniel Ek to get started!!	The app you clicked on: <u>SPOTIFY</u>
Problem # 1	<p>Solve the equations below. Determine whether they are infinite, one, or no solution.</p> <p>a. $3v + 5 + 2v = 5(2 + v)$ $5v + 5 = 10 + 5v$ $-5v \quad -5v$ $5 \neq 10$ no solution</p> <p>b. $2\left(\frac{x}{2} - 4\right) = \frac{1}{2}(x - 8)$ $x - 8 = \frac{1}{2}(x - 8)$ $x - 8 = x - 8$ $+8 \quad +8$ $x = x$ infinite</p> <p>c. $8x - 2x + 4 = 6x - 1$ $6x + 4 = 6x - 1$ $-6x + 4 \quad -6x + 1$ $5 \neq 0$ no solution</p>	<p>Password is the answer that is most common between the 3 of them.</p> <p><u>no solution</u></p>
Clue # 2	Click on the app that was founded on July 5th, 1994 <u>Amazon</u>	The password is the name of the app. (Hint*no capital letters*) <u>amazon</u>

<p>Problem # 2</p>	$4x + 8 = -2x + 20$ $+2x \quad +2x$ $2x + 8 = 20$ <p>Combine like terms (4x and -2x)</p> $2x = 12$ <p>Subtract 8 from both sides.</p> $x = 6$ <p>Divide both sides by 2.</p> <p>Explanation of Mistake:</p> <p>Solve Correctly:</p> $4x + 8 = -2x + 20$ $+2x \quad -8 \quad +2x \quad -8$ $\frac{6x}{6} = \frac{12}{6}$ $x = 2$	<p>The password is the correct answer</p> <p><u>x = 2</u></p>
<p>Clue # 3</p>	<p>Click on the app that was created by Dong Nguyen.</p>	<p>The password to unlock the next location is the name of the app he created on the phone.</p> <p><u>flappy bird</u></p>
<p>Problem # 3</p>	<p>Select all of the following equations that have the same solution as</p> $10 = \underline{-2x} - 3 + \underline{4x} + 5$ $10 = 2x + 2$ $-2 \quad -2$ $8 = 2x$ $\frac{8}{2} = \frac{2x}{2}$ $x = 4$ <p>a. $3x + 3 = 2x + 7$</p> $-2x - 3 \quad -2x - 3$ $x = 4$ <p>b. $4(m - 3) = 10m - 6(m + 2)$</p> $8m - 12 = 10m - 6m - 12$ $8m - 12 = 4m - 12$ $-4m + 12 \quad -4m + 12$ $\frac{4m}{4} = \frac{0}{4}$ $m = 0$	<p>The password to unlock the next location is the letters of the same solution equations</p> <p><u>a and d</u></p>

$$c. \quad 12\left(\frac{1}{3}x + 2\right) = 2(3x - 4)$$

$$4x + 24 = 6x - 8$$

$$-4x + 8 \quad -4x + 8$$

$$\frac{32}{2} = \frac{2x}{2}$$

$$16 = x$$

$$d. \quad \frac{1}{2}(4x - 14) = 1$$

$$2x - 7 = 1$$

$$+7 \quad +7$$

$$\frac{2x}{2} = \frac{8}{2}$$

$$x = 4$$

Clue # 4

Click on the app where he could send his mom a text message.

message
app

The password to unlock the next location is **mom**

mom

Problem # 4

The regular pentagon below has a perimeter of 45 inches. What is the value x?



$$3(2x - 1)$$

$$5[3(2x - 1)] = 45$$

$$5[6x - 3]$$

$$30x - 15 = 45$$

$$+15 \quad +15$$

$$\frac{30x}{30} = \frac{60}{30}$$

$$x = 2$$

The password to unlock the next location is the value of x.

2

Clue # 5

Click on the app owned by Facebook

The password to unlock the next location is the

name of the app owned by facebook.

instagram

Problem # 5

Solve the three equations below.

a. $(0.3a + 0.5(a - 2)) = 0.6(a + 4)$ 10

$$3a + 5(a - 2) = 6(a + 4)$$

$$3a + 5a - 10 = 6a + 24$$

$$8a - 10 = 6a + 24$$

$$-6a + 10 \quad -6a + 10$$

$$\frac{2a}{2} = \frac{34}{2}$$

$a = 17$

b. $8(0.5 + 3) = \frac{1}{3}(18x + 12)$

$$4 + 24 = 6x + 4$$

$$28 = 6x + 4$$

$$\frac{24}{6} = \frac{6x}{6}$$

$4 = x$

c. $\left(\frac{1}{4}(x - 5) - \frac{1}{3}(2x + 1) = 3\right)$ 12

$$3(x - 5) - 4(2x + 1) = 36$$

$$3x - 15 - 8x - 4 = 36$$

$$-5x - 19 = 36$$

$$+19 \quad +19$$

$$\frac{-5x}{-5} = \frac{55}{-5}$$

$x = -11$

Add all of the final answers together $17 + 4 + (-11) = 10$

The sum is your password!!

The password to unlock the last app is the sum of all of your answers:

$$\underline{17} + \underline{4} + \underline{-11} = 10$$

Clue # 6

The last app is where you can send pictures, short videos and add these items to your story!!

The password to unlock the last app is the name of the image on the app..... ghost

!! Done!!