

Pro-Vision Academy Charter School  
High School Math Distance Learning Plan

High School Math  
Distance Learning Plan  
Week of April 6 - 10, 2020

Algebra 1  
(Suggested: 90 minutes of off-line activities)  
Please contact Ms. Redd with any questions at [kredd@pvacademy.org](mailto:kredd@pvacademy.org)

TEKS: A.5A, A.5B, A.5C

Online Resources

- [Desmos Graphing Calculator](#)
- [Simple Graphing Calculator](#)
- [My Open Math](#)
- [Math XL](#)
- [Interact Math](#)

Virtual Nerd Review

<https://virtualnerd.com/algebra-1/linear-equations-solve/one-step/one-step-solutions/word-problem-addition-example>

Monday

*Equations – Review*

**No work. No Credit. No Kidding.**

Solve each equation below. Write each step out as you solve.

1.  $4x - 115 = 225$
2.  $-5x + 13 = 3x + 85$
3.  $-3(x + 5) = 12$
4.  $5x - 4 + 3x = 12$
5.  $-6(2x - 3) + 15 = 9$
6.  $-7(x - 3) = -14$

Set up and solve each scenario below to find the missing number.

7. Ten more than three times a number is negative 14. Find the number.

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8. The sum of 3 times a number and 17 is 5. What is the number?  
9. If Don subtracts 24 from one-half of his number he gets 0. What is Don's number?

There is at least one mistake in each problem. Identify the mistakes and correct the problem.

- |   |   |
|---|---|
| 10. $-8x - 3 - 2x = -45$<br>$-6x - 3 = -45$<br>$-6x = -42$<br>$x = -7$                                      | 11. $15 = 7a + 3 - a$<br>$15 = 6a + 3$<br>$18 = 6a$<br>$3 = a$                              |
| 12. $5(w + 3) + 3(w + 1) = 14$<br>$5w + 8 + 3w + 4 = 14$<br>$8w + 12 = 14$<br>$8w = 2$<br>$w = \frac{1}{4}$ | 13. $x + 3(2x - 4) = -19$<br>$x + 6x - 12 = -19$<br>$7x - 12 = -19$<br>$7x = -7$<br>$x = 0$ |

**Tuesday**

**The Distributive Property**  
**SHOW YOUR WORK!**

Solve the equation.

- 1.)  $5(n + 6) + 24 = 9$
- 2.)  $-3(x + 5) = 12$
- 3.)  $5(w + 3) + 3(w + 1) = 14$
- 4.)  $x + 3(2x - 4) = -19$
- 5.)  $-16 = -4(x + 7)$
- 6.)  $-6(2x - 3) + 15 = 9$

Solve each equation with a variable on both sides.

- 7.)  $-7x - 3x + 2 = -8x - 8$
- 8.)  $-8x + 4(1 + 5x) = -6x - 14$
- 9.)  $4x - 40 = 7(-2x + 2)$
- 10.)  $3(1 - 3x) = 2(-4x + 7)$
- 11.)  $7(5x - 4) - 1 = 14 - 8x$
- 12.)  $-10 + x + 4 - 5 = 7x - 5$

**Wednesday**

Simplify by Distributive Property.

1.  $3(x - y) + 2x$
2.  $3(2x - 4)$
3.  $-5(x - 6)$
4.  $2(b - 8a) + 5(b + 4a)$

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5.  $7(n + 1) - 4n = 4$
6.  $-7(x - 3) = -14$
7.  $8 = 3 + 5(y - 2)$
8.  $2(x - 3) - 3(x - 1) = -5$
  
9.  $5(x - 2) - 5x = 10$
10.  $3(m + 5) - 3(m + 3) = 6$

**Thursday**

Solve each of the following equations for the given variable:

a.) $-2(x + 5) + 6x + 2 = -4$	b.) $0.2x + 4.1 = 12.5$
c.) $12 + 1.6x = 4$	d.) $\frac{p}{18} = \frac{16}{36}$
e.) $\frac{3}{8}(2a + 4) = -24$	f.) $\frac{7}{9}(x - 8) = -42$
g.) $\frac{c-1}{4} = -3$	h.) $\frac{x+1}{2} = \frac{4x+6}{3}$
i.) $\frac{x}{3} - 5 = -47$	j.) $\frac{-2}{3}k - 6 = -14$

**Friday**

**GOOD FRIDAY!**

**Enjoy and Be Safe!**

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**Geometry**

(Suggested: 90 minutes of off-line activities)

Please contact Mr. Tabernilla with any questions at [atabernilla@pvacademy.org](mailto:atabernilla@pvacademy.org)

**Monday**

( Show your solutions )

Solve the following two-step equations by combining like terms:

a)  $7x - 84x = 21$

b)  $4w - 2w = 24$

c)  $-16 = 5y - 9y$

**Tuesday**

( Show your solutions )

Solve the following multiple equations by combining like terms:

a)  $8x - 10 - 3x = 20$

b)  $9y - 2y + 4 = 32$

c)  $12w + 14 + 10w = 80$

**Wednesday**

( Show your solutions )

The formula of Perimeter P for Square =  $4s$

The formula of Perimeter P for Rectangle =  $2b + 2h$

The formula of Perimeter of Parallelogram =  $2l + 2w$

- a) If one side of a Square is = 22.3 ft. Find the Perimeter ( P ) of a square.  
b) If the base = 13m and height = 5.4 m of a Rectangle. Find the Perimeter ( P ) of rectangle.  
c) If the length = 25 cm and width = 6.5ft of a Parallelogram.  
Find the Perimeter ( P ) of parallelogram.

**Thursday**

( Show your solutions )

The formula of a Circumference of Circle: If diameter is given  $C = \pi d$  and if radius is given  $C = 2\pi r$

The formula of the Area of a circle is: if diameter is given first  $r = d/2$   $\pi = 3.14$

$$A = \pi r^2$$

- a) If the diameter is 45m. Find the Circumference ( C ) and Area ( A ) of the circle?  
b) If the radius is 23.44 ft. Find the Circumference ( C ) and Area ( A ) of the circle?

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**Algebra 2**

(Suggested: 90 minutes of off-line activities)

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**Monday**

( Show your solutions )

Simplify the following multi-equations using distributive property.

a)  $3 + 4(x + 5) = 31$     b)  $14 + 2(4y - 3) = 40$     c)  $5m + 2(m + 1) = 23$

**Tuesday**

( Show your solutions )

Simplify the following multi-equations by combining like terms:

a)  $11w - 9 - 7w = 15$     b)  $5x + 3 - 3x = -7$     c)  $6c - 8 - 2c = -16$

**Wednesday**

( Show your solutions )

Simplify the following radical equations:

a)  $2\sqrt{x} - 8 = 0$     b)  $x\sqrt{\phantom{x}} - 7 = 0$     c)  $12\sqrt{x} - 3$

**Thursday**

( Show your solutions )

Simplify the following radical equations with radical on both sides

a)  $\sqrt{3x-17} = \sqrt{x+21}$     2)  $\sqrt{x+4} = \sqrt{2x-1}$     3)  $\sqrt{7-2x} = \sqrt{9-x}$

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**Pre-Calculus**

(Suggested: 90 minutes of off-line activities)

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**Monday**

( Show your solutions )

Simplify the following multi-equations using distributive property:

a)  $7x - (6 - 2x) = 12$       b)  $-3 = 12y - 5(2y - 7)$       c)  $27 = 3c - 3(6 - 2c)$

**Tuesday**

( Show your solutions ) :

Simplify the following multi- equations by combining like terms:

a)  $-2 = 3x - 18 - 5x$       b)  $23 = -4m + 2 + m$       c)  $-5 + 2x - 7x = 35$

**Wednesday**

(Show your solutions)

The formula for Pythagorean Theorem is the sum of the squares of the lengths of the legs equals the square of the length of the hypotenuse:

$$c^2 = a^2 + b^2$$

$$b^2 = c^2 - a^2$$

$$a^2 = c^2 - b^2$$

$$c = \sqrt{a^2 + b^2}$$

$$b = \sqrt{c^2 - a^2}$$

$$a = \sqrt{c^2 - b^2}$$

- 1) The hypotenuse of a right triangles is 8 ft. If one leg (a = 4ft) find the other leg(b)?
- 2) The hypotenuse of a right triangles is 19 ft. If one leg(b=8ft) find the other leg(a)?
- 3) Find the hypotenuse of a right triangles. If one leg (a = 7ft) find the other leg(8ft)?

**Thursday**

(Show your solutions)

The formula for finding the midpoint of a line segment:

$$M = \frac{x_1 + x_2}{2} , \frac{y_1 + y_2}{2}$$

Find the distance between the Points  $P_1$  and  $P_2$

- a.  $P_1 ( 3, - 4 )$  and  $P_2 ( 5, 4 )$
- b.  $P_1 ( 0, 0 )$  and  $P_2 ( 2, 1 )$
- c.  $P_1 ( -1, 0 )$  and  $P_2 ( 2, 4 )$