

Geometry Readiness Test

To Student:

There are certain Algebra skills we use all throughout the year which should be mastered for optimum performance in Geometry. Without these skills, it will be a struggle to pass Geometry and any other future math class.

1) Please Test Yourself

The test starts on next page

Geometry Readiness Test

Student Score: _____ out of 20 questions were correct.

Write on this test showing your work.

Only use your calculator for #20.

All other answers should be reduced completely by hand.

Geometry Readiness Exam

1) Solve $2x + 7 = 5x - 12$

7) Solve $x^2 - 144 = 0$

2) Solve $-4(5x - 3) = 7(-2x + 6)$

8) Solve $x^2 - 7x + 12 = 0$

3) Solve $\frac{1}{2}x - \frac{3}{4} = \frac{3}{4}x + \frac{5}{4}$

9) Solve $x^2 - 6 = 22$

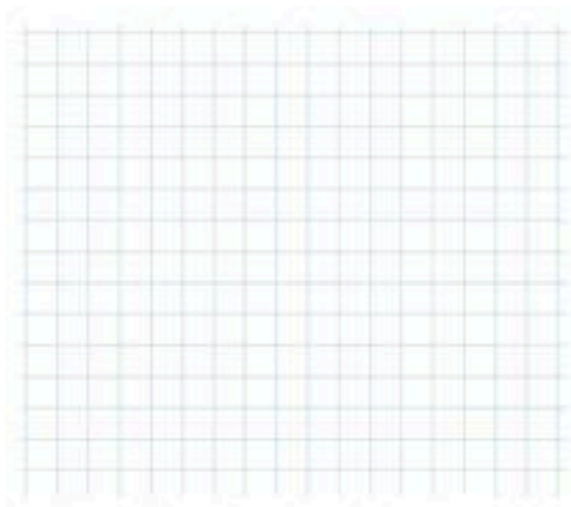
4) Solve this inequality $-7x > 56$

5) Solve $.7 + .1x = -.6$

10) Solve this system of equations
a. $x - 2y = 5$ and $2x - 3y = -6$

6) Solve $\frac{2(x-10)}{3} = \frac{x}{3}$

- 11) Graph with detail and find the slope of $y = -2x + 6$
12) Graph with detail and find the slope of $y = -4$
13) Graph with detail and find the slope of $x = -2$



- 14) What are the x and y intercepts of $3x - 2y = 12$

15) Simplify $(x^2)^3 \cdot (x^3)^4$

18) Simplify $(2\sqrt{3})(-3\sqrt{3})$

16) Simplify

- a. $\sqrt{12}$
- b. $\sqrt{8}$
- c. $8\sqrt{20}$
- d. $\sqrt{75}$

19) $a^2 + b^2 = c^2$, If $a=6$, $c=9$ find b in radical form

17) Simplify in radical form

$$7\sqrt{6} - 19\sqrt{6} + \sqrt{24}$$

20) Use your Calculator:

- a. (Round to the nearest tenth) Find the value:

$$7\sqrt{10} - 2\sqrt{13} =$$

Answer Key:

Video Solution Links:

[Problems 1-3](#)

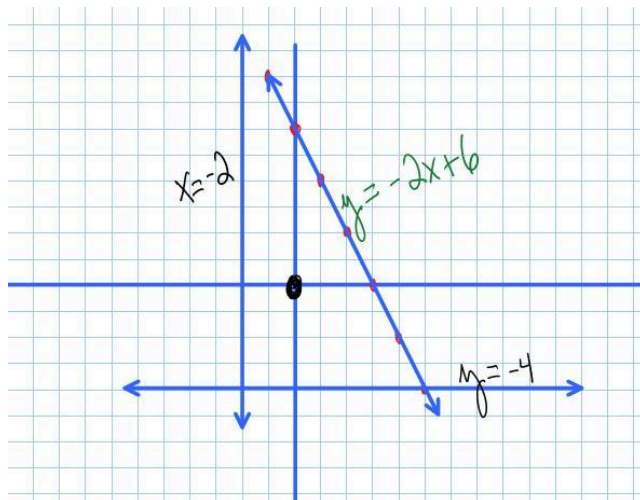
[Problems 4-6](#)

[Problems 7-10](#)

[Problems 11-15](#)

[Problems 16-20](#)

- 1) $x = \frac{19}{3}$
- 2) $x = -5$
- 3) $x = -8$
- 4) $x < -8$
- 5) $x = -13$
- 6) $x = 20$
- 7) $x = \pm 12$
- 8) $x = 3$ and $x = 4$
- 9) $x = \pm 2\sqrt{7}$
- 10) $x = -27$ and $y = -16$ $(-27, -16)$
- 11) 12) 13)



14) x intercept is (4,0), y intercept is (0,-6)

15) x^{18}

16) a. $2\sqrt{3}$ b. $2\sqrt{2}$ c. $16\sqrt{5}$ d. $5\sqrt{3}$

17) $-10\sqrt{6}$

18) $x = -18$

19) $b = \pm 3\sqrt{5}$

20) 14.9