

Precalculus:

Homework

9/6-9/15

due: Thursday: read pp. 2-7

1. pg. 11 / #41, 42, 45, 46
2. pg. 13 / #67, 68
3. a. What is the multiplicative identity? b. What is the additive identity?
4. Give the additive inverse of: a. -9 b. $\frac{2}{5}$ c. 0
5. Give the multiplicative inverse of: a. 5 b. $-\frac{3}{4}$ c. 0

Friday: read pp. 16-17, 19

1. pg. 20 / #14, 16, 25, 28
2. pg. 22 / #37
3. Find the abscissa of a point whose ordinate is 5 such that the distance between that point and the point $(1, -3)$ is 10.
4. The midpoint of \overline{PQ} is $(5, -2)$. If P has coordinates $(8, 6)$, find the coordinates of Q .
5. Find the distance from the given point to the given line:
a. $(3, -2)$, $5x - 12y + 7 = 0$ b. origin, $2x + 3y = 9$ c. $(1, 7)$, $6x + 8y = 15$

Monday: read pp. 31-32, 35

1. pg. 40 / #5, 6, 9, 10
2. pp. 42-43 / #56, 61, 66
3. Use the concept of slope to determine whether the three points $(-1, 2)$, $(2, 4)$, and $(6, 9)$ are collinear.
4. Given the points: $A(3, -4)$, $B(7, 9)$ a. Find the slope of \overline{AB} . B. Find the slope of a line parallel to \overline{AB} . C. Find the slope of a line perpendicular to \overline{AB} .

Tuesday: read pp. 32-34, 36

1. pp. 40-41 / #13, 16, 17, 20, 22, 42, 43
2. Write an equation for the perpendicular bisector of the line segment determined by the points $(-1, 3)$ and $(5, -7)$.

on: Wednesday: test

due: Thursday: read pp. 86-87

1. pp. 102-103 / #5, 6, 7, 72
2. Let $f(x) = x^2 - 5x + 3$, find: a. $f(3)$ b. $f(-4)$ c. $f(2a)$ d. $f(x + 2)$

Friday: read pp. 88-89

1. pg. 102 / #8, 9, 13, 15
2. Find the domain and the range of each function: a. $y = 2x + 5$ b. $y = x^2 - 3$
3. If $f(x) = 7$, find: a. $f(9)$ b. the domain of $f(x)$ c. the range of $f(x)$

Monday:

- Find the domain and the range of each function: 1. $f(x) = 3x + 1$ 2. $y = x^2 + 4$
3. $g(x) = 5 + \sqrt{x - 1}$ 4. $h(x) = \frac{x^2 - 9}{x - 3}$ 5. $y = \frac{x^2 - 2x - 3}{x + 1}$