

Precalculus

Homework Lecture 7

1. Draw a coordinate system by hand roughly. Plot the points. Determine in which quadrant is the point located. The answer key has not been proofread, use with caution.

(a) $(3, 2)$.

answer: Quadrant I

(d) $(0, 0)$.

answer: Quadrant I and II

(f) $(2, 0)$.

(b) $(-1, 1)$.

answer: Quadrants I and IV

answer: lies in all Quadrants

(g) $(2, -3)$.

(c) $(0, 1)$.

answer: Quadrant II

(e) $(-3, -2)$.

answer: Quadrant III

answer: Quadrant IV

2. Find the distance between the indicated points. The answer key has not been proofread, use with caution.

(a) $(2, 3)$ and $(-1, 2)$.

answer: 5

answer: $\sqrt{10}$

(d) $(-1, -2)$ and $(2, -4)$.

(b) $(1, 1)$ and $(-1, -1)$.

answer: $\sqrt{13}$

answer: $2\sqrt{2}$

(e) $(-3, -2)$ and $(-2, 4)$.

(c) $(0, 0)$ and $(3, 4)$.

answer: $\sqrt{37}$

3. Find the midpoint of the segment between the indicated points. The answer key has not been proofread, use with caution.

(a) $(2, 3)$ and $(-1, 2)$.

answer: $(\frac{3}{2}, \frac{5}{2})$

answer: $(\frac{3}{2}, \frac{5}{2})$

(d) $(-1, -2)$ and $(2, -4)$.

(b) $(1, 1)$ and $(-1, -1)$.

answer: $(0, -\frac{1}{2})$

answer: $(0, 0)$

(e) $(-3, -2)$ and $(-2, 4)$.

(c) $(0, 0)$ and $(3, 4)$.

answer: $(1 - \frac{5}{2}, \frac{1}{2})$