

King Fahd University of Petroleum and Minerals
Prep-Year Math Program
Math (001)-Term (181)
Recitation (1.1)

Question 1 (1.1 Textbook Exercise 45): Find a point on the y-axis that is equidistant from the points $(5, -5)$ and $(1, 1)$

Answer: The point is $(0, -4)$

Question 2: Find the distance between the points $P(2x, -7x)$ and $Q(-2x, -4x)$ where $x < 0$

Answer: $-5x$

Question 3: If the point $(1, 4)$ is 5 units from the midpoint of the line segment joining $(3, -2)$ and $(x, 4)$, then x is equal to

- (a) either 7 or -9
- (b) -15
- (c) either $4 + 3\sqrt{11}$ or $4 - 3\sqrt{11}$
- (d) either -7 or 9
- (b) 15

Answer (a): $x = -9$ or $x = 7$

Question 4 (1.1 Textbook Exercise 48): If $M(6, 8)$ is the midpoint of the line segment AB and if A has coordinates $(2, 3)$ then the coordinates of B is

- (a): $\left(4, \frac{11}{2}\right)$ (b): $(16, 25)$ (c): $(10, 13)$ (d): $(12, 10)$ (e): $(4, 5)$

Answer (c):