Page 89 - Practice Problems A – Finding Resultant and Magnitude and Direction

1. A truck driver is attempting to deliver some furniture. First, he travels 8 km east, and then he turns around and travels 3 km west. Finally he turns again and travels 12 km east to his destination.
2. What distance has the driver traveled?
3. What is the driver’s total displacement?
4. While following the direction on a treasure map, a pirate walks 45.0 m north and then turns and walks 7.5 m east. What single straight line displacement could the pirate taken to reach the treasure?
5. Emily passes a soccer ball 6.0 m directly across the field to Kara. Kara then kicks the ball 14.5 m directly down the field to Luisa. What is the ball’s total displacement as it travels between Emily and Luisa?
6. A hummingbird, 3.4 m above the ground, flies 1.2 m along a straight path. Upon spotting the flower below, the hummingbird drops downward 1.4 m to hover in found of the flower. What is the humming-birds’ total displacement?