8.F Delivering the Mail, Assessment Variation

Task

Joshua's mail truck travels 14 miles every day he works, and is not used at all on days he does not work. At the end of his 100th day of work the mail truck shows a mileage of 76,762.

a. Fill in the blanks to express the mileage y as a linear function of the number of days x that Joshua has worked:

$$y = [\text{blank 1}]x + [\text{blank 2}].$$

b. What are the units of the number [the number the student typed into in blank 1] that appears in your equation?

c. What are the units of the number [the number the student typed into in blank 2] that appears in your equation?

d. Which of the following is a correct interpretation of the number [the number the student typed into in blank 1] that appears in your equation? (Select all that apply.)

    i. The mileage at the end of Joshua's first day of work.

    ii. The number of miles Joshua drives the truck each day he works.

    iii. The mileage at the beginning of Joshua's first day of work.

    iv. The number of days Joshua works for each mile he drives.

    v. The number of miles Joshua drives at work over 100 days.

e. In this context, which of the following is a correct interpretation of the number [the

1

number the student typed into in blank 2] that appears in your equation? (Select all that apply.)

   i. The mileage at the end of Joshua's first day of work.

   ii. The number of miles Joshua drives the truck each day he works.

   iii. The mileage at the beginning of Joshua's first day of work.

   iv. The number of days Joshua works for each mile he drives.

   v. The number of miles Joshua drives at work over 100 days.