

Name

Use Linear Equations in Slope-Intercept Form

Alg. I

I can write an equation of a line using a point on a line.

Example 4:

$$\begin{aligned}
 4) \quad C &= 35m + b \\
 250 &= 35(6) + b \\
 250 &= 210 + b \\
 -210 \quad -210 & \\
 \hline
 b &= 40
 \end{aligned}$$

$$\begin{aligned}
 C &= 35m + 40 \\
 C &= 35(10) + 40 \\
 C &= 350 + 40 = 390 \\
 \boxed{\$390}
 \end{aligned}$$

Ch. 3 Quiz

Example 5:

5) \$76 for 3 races $(x_1, y_1) = (3, 76)$
 \$124 for 7 races $(x_2, y_2) = (7, 124)$

$$m = \frac{124 - 76}{7 - 3} = \frac{48}{4} = 12$$

$$y = mx + b$$

$$\begin{aligned}
 76 &= 12(3) + b \\
 76 &= 36 + b \\
 -36 \quad -36 & \\
 \hline
 b &= 40
 \end{aligned}$$

a) 40

b) 12

c) $C = 12r + 40$

Skills practice, pg. 136, #