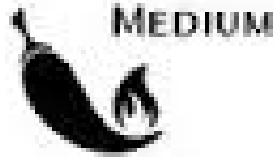


# Topic No. 04



MEDIUM

#1

1. Abby is excited about going on a shoe factory tour. There is an entrance fee of \$150, and each shoe purchased on the tour costs \$100. Which equation models the relationship between total cost,  $y$ , and the number of shoes,  $x$ , Abby buys during the tour?

(A)  $y = \frac{x}{150} + 100$

(B)  $y = 150x + 100$

(C)  $y = \frac{x}{100} + 150$

(D)  $y = 100x + 150$

2. Bob is excited about going on a factory tour where they make baseballs. Baseballs are available for sale on the tour for \$20, and there is an entrance fee of \$40. Which equation models the relationship between total cost,  $y$ , and the number of baseballs,  $x$ , Bob buys during the tour?

(A)  $y = \frac{x}{20} + 40$

(B)  $y = 20x + 40$

(C)  $y = \frac{x}{40} + 20$

(D)  $y = 40x + 20$

# Topic No. 04



#1

3. A stock pays an investor \$3,000 every month, and the investor can sell the stock for \$100,000 whenever she wants. Which equation models the relationship between total amount in thousands of dollars,  $y$ , and the number of months,  $x$ , the investor waits before selling the stock?

(A)  $y = \frac{x}{3} + 100$

(B)  $y = 3x + 100$

(C)  $y = \frac{x}{100} + 3$

(D)  $y = 100x + 3$

4. Danielle is excited about going on a factory tour where they make hats. Hats are available for sale on the tour for \$40, and there is an entrance fee of \$20. Which equation models the relationship between total cost,  $y$ , and the number of hats,  $x$ , Danielle buys during the tour?

(A)  $y = \frac{x}{20} + 40$

(B)  $y = 20x + 40$

(C)  $y = \frac{x}{40} + 20$

(D)  $y = 40x + 20$