

Quiz #3

Math Time pp. 13

A.

1. #4

2. #5

3. #9

B.

1. #6

2. #7

3. #9

C.

1. #1

2. #2

3. #5

Quiz #3

A.

$$\begin{aligned} 1. \quad & (m)^3 + (5)^3 \\ & = (m + 5) (m^2 - 5m + 25) \end{aligned}$$

$$\begin{aligned} 2. \quad & (4)^3 - (b)^3 \\ & = (4 - b) (16 + 4b + b^2) \end{aligned}$$

$$\begin{aligned} 3. \quad & (10)^3 + (y)^3 \\ & = (10 + y) (100 - 10y + y^2) \end{aligned}$$

B.

$$\begin{aligned} 1. \quad & 125(8n^3 - m^3) \\ & = 125[(2n)^3 - (m)^3] \end{aligned}$$

$$= 125 (2n - m) (4n^2 + 2mn + m^2)$$

$$\begin{aligned} 2. \quad & 3(27x^3 + 64y^3) \\ &= 3[(3x)^3 + (4y)^3] \\ &= 3(3x + 4y)(9x^2 - 12xy + 16y^2) \end{aligned}$$

$$\begin{aligned} 3. \quad & a^2b(a^3b^3 + 1) \\ &= a^2b[(ab)^3 + (1)^3] \\ &= a^2b(ab + 1)(a^2b^2 - ab + 1) \end{aligned}$$

C.

$$\begin{aligned} 1. \quad & (x - y) \\ 2. \quad & (25a^2 - 5a + 1) \\ 3. \quad & (2p + 5q)^3 \end{aligned}$$