

59. For all nonzero x , y , and z such that $x = yz$, which of the following *must* be equivalent to xy ?

A. $\frac{z}{x}$

B. yz^2

C. yz

D. $\frac{x^2}{z}$

E. $\frac{x}{y}$

$$x = x$$

$$y = \frac{x}{z}$$

Solving for
variables using
substitution

$$xy = x \left(\frac{x}{z} \right) = \frac{x^2}{z}$$

$$625(1) = (?)^2$$

$$\sqrt{625} = \sqrt{?^2}$$

$$25 = ?$$

59. For all real numbers b and c such that the product of c and 3 is b , which of the following expressions represents the sum of c and 3 in terms of b ?

A. $b + 3$

B. $3b + 3$

C. $3(b + 3)$

D. $\frac{b + 3}{3}$

E. $\frac{b}{3} + 3$



57. If $x + y = 6$, then $x^2 = ?$

- E
- A. $y^2 - 12y - 36$
 - B. $y^2 - 36$
 - C. $6 - y^2$
 - D. $36 - y^2$
 - E. $36 - 12y + y^2$

$$x + y = 6$$
$$x = 6 - y$$

therefore

$$x^2 = (6 - y)^2 = 36 - 12y + y^2$$

DO YOUR FIGURING HERE.

48. What is the value of $(x+2)(x-3)+5$ when $x^2-x-6=-4$?

- F. -2
- G. -1
- H. 1
- J. 2
- K. 3

$$(x+2)(x-3) = x^2 - x - 6 = -4$$

Substitute $(x+2)(x-3)$ with -4

$$(-4) + 5 = \underline{1}$$

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E

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