

Drill 2

Answers can be found in Part IV.

3

$$2(n + 5) = 3(n - 2) + 8$$

In the equation above, what is the value of n ?

- A) 1
- B) 3
- C) 4
- D) 8

**8**

If $3^{x+2} = 243$, what is the value of x ?

- A) 1
- B) 2
- C) 3
- D) 4

7

$$2x - y > -3$$

$$4x + y < 5$$

$$y > -6$$

Which of the following points is in the solution set of the system of inequalities above?

- A) $(-4, -1)$
- B) $(-3, -2)$
- C) $(-1, -1)$
- D) $(3, -5)$

10

If $\frac{24x}{4} + \frac{1}{x} = 5$, what is the value of x ?

- A) $-\frac{1}{6}$
- B) $\frac{1}{6}$
- C) $\frac{1}{4}$
- D) $\frac{1}{2}$



20

$$-\frac{5}{7} - \frac{11}{7}u = -v$$
$$2v = 7 + 5u$$

Based on the system of equations above, what is the value of v ?

- A) -4
- B) -3
- C) -1
- D) 0



25

An alloy needs to contain between 10 and 15% of titanium. Which of the following inequalities represents the amount in kilograms, x , of a 20% titanium alloy that should be mixed with a 5% titanium alloy to produce 10 kilograms of an alloy with the acceptable percentage of titanium?

- A) $1.33 \leq x \leq 1.67$
- B) $2.25 \leq x \leq 3.25$
- C) $3.33 \leq x \leq 6.67$
- D) $7.25 \leq x \leq 9.75$