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$\qquad$

$$
\text { Reporting Category } 4 \text { (A.8.B.) }
$$

1. Which graph best represents a solution to this system of equations?

$$
\begin{aligned}
& 2 x-3 y=0 \\
& x+2 y=-7
\end{aligned}
$$





2. Marcos had 15 coins in nickels and quarters. He had 3 more quarters than nickels. He wrote a system of equations to represent this situation, letting $x$ represent the number of nickels and $y$ represent the number of quarters. Then he solved the system by graphing. What is the solution?

A $(6,9)$
B $(5,10)$
C $(9,6)$
D $(10,5)$
3. What is the $x$-coordinate of the solution to the system of linear equations below?

$$
\begin{gathered}
4 x+5 y=8 \\
2 x-3 y=-18
\end{gathered}
$$

F $\quad-4$
G -3
H 3
J 4
$\qquad$
$\qquad$

$$
\text { Reporting Category } 4 \text { (A.8.B.) }
$$

4. If the system of linear equations $2 x+y=1$ and $y=-\frac{1}{2} x+1$ are graphed on the same coordinate grid, which of the following is the solution to this system of linear equations?

A $(2,0)$
B $(0,2)$
C $(0.5,0)$
D Not here

5. Which of the following graphs best represents the solution to the system of linear equations shown below?

$$
\begin{gathered}
x+5 y=-5 \\
4 x-3 y=-20
\end{gathered}
$$

A


B


C


D

$\qquad$
$\qquad$

$$
\text { Reporting Category } 4 \text { (A.8.B.) }
$$

6. At a pet store the total cost of 8 pounds of Brand $X$ dog food and 1 pound of Brand $Y$ dog food is $\$ 8.40$, including tax. The total cost of 16 pounds of Brand $X$ dog food and 8 pounds of Brand $Y$ dog food is $\$ 24.00$, including tax. What is the price per pound of Brand Y dog food?

A $\$ 0.90$
B $\$ 1.20$
C $\$ 2.60$
D $\$ 4.08$
7. At a firefighters' pancake breakfast, the firefighters served 345 people and raised $\$ 1395$. If the cost of $a$, an adult's ticket to the pancake breakfast, was $\$ 5$ and the cost of $c$, a child's ticket, was $\$ 3$, what was the number of adult tickets sold?

F 165
G 180
H 279
J 345
8. The graph of the equation $y=\frac{5}{3} x-3$ is given below. Graph $y=x+1$ on the grid.

What is the solution to this system of equations?
A $(0,1)$
B $(5,6)$
C $(6,7)$
D No solution

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## Reporting Category 4 (A.8.B.)

9. Which of the following is the solution for this system of linear equations?

$$
\begin{aligned}
& y=-x+2 \\
& 3 x-y=-13
\end{aligned}
$$

F $\left(\frac{17}{3}, 4\right)$
H $(-3,4)$
G $\left(-1, \frac{8}{3}\right)$
J $(-3,-4)$
10. The equations of two lines are $6 x-y=4$ and $y=4 x+2$. What is the value of $x$ in the solution for this system of equations?

A $x=14$
B $\quad x=3$
C $\quad x=1$
D $x=6$
11. Look at the system of linear equations graphed on the coordinate grid.

Which of the following is closest to the solution to this system of linear equations?
A $\left(-5 \frac{1}{2}, 2 \frac{1}{4}\right)$
C $\left(-6 \frac{1}{4}, 1 \frac{3}{4}\right)$
B $\left(-5 \frac{3}{4}, 1 \frac{2}{3}\right)$
D $\left(-5 \frac{2}{3}, \frac{3}{4}\right)$

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## Reporting Category 4 (A.8.B.)

12. The graph of a system of linear equations is shown below.

Which of the following is the solution to this system of linear equations?

F $(0,4)$
G $(8,1)$
H $(0,-3)$
J $(10,2)$

13. A large cheese pizza at Palanzio's Pizzeria costs $\$ 6.80$ plus $\$ 0.90$ for each topping. The cost of a large cheese pizza at Guido's Pizza is $\$ 7.30$ plus $\$ 0.65$ for each topping.
How many toppings need to be added to a large cheese pizza from Palanzio's Pizzeria and Guido's Pizza in order for the pizzas to cost the same, not including tax?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.
14. Which is the solution to this pair of linear equations?

$$
\begin{aligned}
& 5 y-2 x=6 \\
& 3 x-2 y=13
\end{aligned}
$$

A $(3,-2)$
B $(5,-2)$
C $(7,4)$
D $(8,-4)$

