$\qquad$ Pd $\qquad$ Date : $\qquad$

1. What is the positive solution to this equation $2 x^{2}-47 x=130$ ?

Answer: $\qquad$
2. The graph of a linear function is shown on the grid:


Which equation is best represented by this graph?
A. $y+2=\frac{-3}{4}(x-8)$
B. $y-2=\frac{-3}{4}(x-8)$
C. $y+2=\frac{-3}{4}(x+8)$
D. $y-2=\frac{-3}{4}(x+8)$
3. What is the solution to:

$$
-3(4 p+7)=9(12-p)
$$

Answer : $\qquad$
4. What is the value of $x$ in the solution to this system of equations?

$$
\begin{gathered}
8 x-3 y=24 \\
y=6 x-13
\end{gathered}
$$

F. 4
G. -1.5
H. 1.5
J. -4
5. Which function is equivalent to $y=4(x-1)^{2}+12$ ?
A. $y=4 x^{2}-8 x+16$
B. $y=4 x^{2}+16$
C. $y=4 x^{2}-8 x+8$
D. $y=4 x^{2}-8$
6. What is the slope of the graph $y=7 x-5$ ?
F. -5
G. $-\frac{5}{7}$
H. 7
J. $\frac{7}{5}$
7. Which expression is equivalent to $\left(5+8 n-3 n^{2}\right)-\left(7 n-6 n^{2}-10\right)$ ?
A. $3 n^{2}-15 n+15$
B. $3 n^{2}+n+15$
C. $3 n^{2}-n+5$
D. $3 n^{2}-15 n-5$
8. The graph of a quadratic function is shown on the grid:


Which function is best represented by this graph
F. $g(x)=x^{2}-4 x-5$
G. $g(x)=x^{2}+4 x-5$
H. $g(x)=x^{2}-4 x+5$
J. $g(x)=x^{2}+4 x+5$
$\qquad$ Pd $\qquad$ Date : $\qquad$
9. Which value of $x$ makes the equation $1.5(3 x-7)=7.5$ true?
A. 4
B. -1
C. 4.5
D. -2.5
10. A system of equations is graphed on the grid


Which system of equations does the graph represent?
F. $y=x+3$
H. $y=-x-3$
$y=3 x+4$
$y=-3 x+4$
G. $y=-x+3$
J. $y=x-3$
$y=3 x-4$
$y=-3 x-4$
11. Which function is equivalent to:
$h(x)=x^{2}-17 x-60$ ?
A. $h(x)=(x-10)(x-6)$
B. $h(x)=(x-12)(x+5)$
C. $h(x)=(x-20)(x+3)$
D. $h(x)=(x-15)(x+4)$
12. Which value of $x$ is a solution to this equation $5 x^{2}+33 x-56=0$ ?
A. $x=8$
B. $x=-8$
C. $x=-1.4$
D. $x=1.4$
13. Which expression is equivalent to $\left(x y^{3}\right)^{5}$ ?
F. $x^{5} y^{15}$
G. $x^{5} y^{8}$
H. $x^{3} y^{15}$
J. $x^{3} y^{8}$
14. What is the equation in slope intercept form of a line that passes through points $(-4,2)$ and $(8,11)$ ?
A. $y=0.75 x+5$
B. $y=0.75 x+1$
C. $y=5 x+3$
D. $y=5 x-6$
15. The graph of a linear function is shown on the grid.


What is the rate of change of $y$ with respect to x for this function?
Answer : $\qquad$
16. The table shows a linear relationship between $x$ and $y$.

| $x$ | -16 | -8 | 8 | 24 |
| :---: | :---: | :---: | :---: | :---: |
| $y$ | 18 | 15 | 9 | 3 |

What is the rate of change of $y$ with respect to $x$ ? Answer : $\qquad$ .

