Algebra Review \#33 SHOW HOW YOU SOLVED EACH PROBLEM
1.

Solve:

$$
\left(2 x^{2}-5 x+7\right)+\left(5 x^{2}+7 x-13\right)
$$

2. 

Solve:

$$
\left(5 x^{2}+x-10\right)-\left(x^{2}+16 x-10\right)
$$

3. How many solutions does the following equation have?

$$
5(x-3)=-(-6 x+1)
$$

A Infinite
B One
C None
D Two
$\qquad$
4. Fill in the properties that justify each step:

| $-(-5+x)+3 x=x+10$ | Given |
| :--- | :--- |
| $5-x+3 x=x+10$ |  |
| $5+2 x=x+10$ | Combining Like Terms |
| $5+x=10$ |  |
| $x=5$ |  |

5. Find the equation of a line with a slope of -6 and which goes through the point $(2,3)$.
6. Write an equation for the graph shown below:

7. Which of the following are equivalent to $8 \sqrt{21}$

A $\sqrt{29}$
B $\sqrt{84}$
C $\sqrt{168}$
D $\sqrt{1344}$
8. Which section should be the shaded solution for the following system of inequalities:

$$
\begin{gathered}
y \leq-\frac{3}{2} x-1 \\
y \geq x+4
\end{gathered}
$$



A 2
B 3
C 4
D 1
9. Simplify:

$$
\frac{2 x^{3} y^{-2}}{-8 x^{4} y^{-1}}
$$

10. Solve for $x$ :

$$
\frac{4}{5}=\frac{(x-3)}{10}
$$

