Algebra 1

Name Key ID: 1

Date _____ Period ____

Challenge! :-P

Solve each equation.

1) $-3(x+6)-7(5x-6)=62$

$-3x-18-35x+42=62$

$-38x+24=62$

$-38x=38$

$\boxed{x=-1}$

2) $\frac{8}{9}=-\frac{4}{3}r+r$

$\frac{-4\cdot 3}{3\cdot 3}=\frac{-12}{9}$

$\frac{8}{9}=-\frac{12}{9}r+\frac{9r}{9}$

$\frac{8}{9}=\frac{-3r}{9}$

$8=-3r$

$\boxed{\frac{-8}{3}=r}$

Solve WITHOUT distributing....

3) $155=5(7-3x)$

$\frac{155}{5}=\frac{5(7-3x)}{5}$

$31=7-3x$

$24=-3x$

$\boxed{-8=x}$

Solve each equation.

4) $-(-16-7m)+8=-3(12-m)$

$16+7m+8=-36+3m$

$24+7m=-36+3m$

$4m=-60$

$\boxed{m=-15}$

5) $\left[\frac{5}{2}n-\frac{7}{2}\left(-\frac{7}{2}n+\frac{5}{2}\right)=-\frac{153}{4}\right]\times 4$

$\frac{20n}{2}-\frac{28}{2}\left(-\frac{7}{2}n+\frac{5}{2}\right)=-153$

$10n-14\left(-\frac{7}{2}n+\frac{5}{2}\right)=-153$

$10n+49n-35=-153$

$59n-35=-153$

$59n=188$

$\boxed{n=-2}$