Mr. Pass- 7th Algebra A Honors

Name_____

Extra Practice for Chapter 3 Test

Date_____

Solve each equation.

1) $\frac{41}{12} = -\frac{5}{3}k + 2 + \frac{1}{4}k$

Combine like terms

$\frac{41}{12} = -\frac{17}{12}k + 2$

$-\frac{24}{12}$ $\quad -2$

$-\frac{12}{17} \cdot \frac{17}{12} = -\frac{17}{12}k \cdot -\frac{12}{17}$

$-1 = k$

2) $\frac{13}{5}x + \frac{15}{4} - \frac{4}{3} = -\frac{32}{15}$

Combine like terms

$-\frac{20}{12}k + \frac{3}{12}k = -\frac{17}{12}k$

$\frac{45}{12} - \frac{16}{12} = \frac{29}{12}$

$\frac{13}{5}x + \frac{29}{12} = -\frac{32}{15}$

60. $\left(\frac{156}{60}x + \frac{145}{60} = -\frac{128}{60}\right) \cdot 60$ (all terms multiplied by 60 to "clear the fractions")

$156x + 145 = -128$

$-145 \quad -145$

$\frac{156x}{156} = \frac{-273}{156}$ $\quad \frac{91}{52} \div \frac{13}{13} = \frac{7}{4}$

$x = -\frac{7}{4}$

3) $-\frac{14}{5}a - \frac{2}{3}a = \frac{312}{25}$

$-\frac{42}{15}a - \frac{10}{15}a = \frac{312}{25}$

$-\frac{15}{52} \cdot -\frac{52}{15}a = \frac{312}{25} \cdot -\frac{15}{52}$

$a = -\frac{18}{5}$

4) $\frac{23}{3} = \frac{13}{6}x + \frac{5}{3}x$

5) $\frac{7}{5}n+\frac{9}{4}+\frac{4}{5}n=\frac{1597}{180}-\frac{10}{3}n-\frac{10}{3}+\frac{2}{5}$

$\frac{9}{4}+\frac{11}{5}n=\frac{1597}{180}-\frac{600}{180}+\frac{72}{180}-\frac{10}{3}n$

$\frac{9}{4}+\frac{11}{5}n=\frac{1069}{180}-\frac{10}{3}n$

$180\left(\frac{405}{180}+\frac{396}{180}n=\frac{1069}{180}-\frac{600}{180}n\right)180$ (all terms multiplied by 180 to "clear the fractions")

$405+396n=1069-600n$

$-405\quad +600n\quad -405\quad +600n$

$996n=664$

$\frac{996}{996}\quad\frac{664}{996}\quad\frac{332}{498}\quad\frac{166}{249}\quad\frac{2}{3}$

$n=\frac{2}{3}$

6) $-\frac{14}{5}x+1=\frac{59}{20}-\frac{3}{2}x$

7) $-\frac{86}{25}+\frac{2}{3}p=-\frac{8}{5}p-\frac{3}{5}p$

$-\frac{86}{25}+\frac{2}{3}p=-\frac{11}{5}p$

$-\frac{86}{25}+\frac{10}{15}p=-\frac{33}{15}p$

$-\frac{10}{15}p\quad -\frac{10}{15}p$

$\frac{3}{3}\cdot-\frac{86}{25}=-\frac{43}{15}p\cdot\frac{5}{5}$

$75\left(-\frac{258}{75}=-\frac{215}{75}p\right)75$ (all terms multiplied by 75 to "clear the fractions")

$\frac{6}{5}\quad\frac{-258}{-215}=\frac{-215p}{-215}$

$\frac{6}{5}=p$

8) $\frac{5}{2}k+\frac{4}{3}=-\frac{119}{12}-\frac{15}{4}k-\frac{1}{2}k$

Answers to Extra Practice for Chapter 3 Test

1) $\{-1\}$

2) $\left\{-\frac{7}{4}\right\}$

3) $\left\{-\frac{18}{5}\right\}$

4) $\{2\}$

5) $\left\{\frac{2}{3}\right\}$

6) $\left\{-\frac{3}{2}\right\}$

7) $\left\{\frac{6}{5}\right\}$

8) $\left\{-\frac{5}{3}\right\}$