Pg. 385-386 # 7, 9-11.

7a) $4r - 2 = 14$

$4r - 2 + 2 = 14 + 2$

$\frac{4r}{4} = \frac{16}{4}$

$\boxed{r = 4}$

b) $3 - 3x = -9$

$-3 \quad -3$

$3 - 3x = -9 - 3$

$\frac{-3x}{-3} = \frac{-12}{-3}$

$\boxed{x = 4}$

c) $-22 = -10 + 2m$

$+10 \qquad +10$

$-10 + 2m = -22$

$\frac{2m}{2} = \frac{-12}{2}$

$\boxed{m = -6}$

d) $53 = -9k - 1$

$+1 \quad +1$

$-9k - 1 = 53 + 1$

$\frac{-9k}{-9} = \frac{54}{-9}$

$\boxed{k = -6}$

9a) $6r + 6 = 18$

$6r + 6 - 6 = 18 - 6$

$\frac{6r}{6} = \frac{12}{6}$

$\boxed{r = 2}$

b) $4m + 8 = 12$

$4m + 8 - 8 = 12 - 8$

$\frac{4m}{4} = \frac{4}{4}$

$\boxed{m = 1}$

c) $39+9g=75$

$39-39+9g=75-39$

$\frac{9g}{9}=\frac{36}{9}$

$\boxed{g=4}$

d) $-37=8f-139$

$8f-139=-37$

$8f-139+139=-37+139$

$\frac{8f}{8}=\frac{102}{8}$

$f=12\frac{6}{8}$

or

12.75

10 a) $-17=3k+4$

$3k+4=-17$

$3k+4-4=-17-4$

$\frac{3k}{3}=\frac{-21}{3}$

$k=-7$

b) $29=-14n+1$

$-14n+1=29$

$-14n+1-1=29-1$

$\frac{-14n}{-14}=\frac{28}{-14}$

$n=-2$

c) $8x-7=-31$

$8x-7+7=-31+7$

$\frac{8x}{8}=\frac{-24}{8}$

$x=-3$

d) $-10=4n-12$

$4n-12=-10$

$4n-12+12=-10+12$

$\frac{4n}{4}=\frac{2}{4}$

$n=0.5$

11. Do a check with $x = -3$

a) $-8x - 1 = 25$

$-8(-3) - 1 = 25$

$24 - 1 = 25$

$23 \neq 25$ (no).

b) $3 - 7x = -24$

$3 - 7(-3) = -24$

$3 - -21 = 24$

$3 + 21 = 24$

$24 \neq -24$ (no)

c) $29 = -10(-3) - 1$

$29 = --30 - 1$

$29 = 30 - 1$

$29 = 29$ ✓

d) $30 = 6(-3) + 12$

$30 = -18 + 12$

$30 \neq -6$ (no)