

$$\begin{array}{r} \text{EX1)} \quad |x| + 8 = 36 \\ \quad \quad -8 \quad -8 \\ \hline |x| = 28 \\ x = \pm 28 \\ \quad \quad \uparrow \end{array}$$

EX2)

$$|R| = -12$$

NS \emptyset

Ex 3)

$$\sqrt{r} = 4$$

$$\sqrt{r} = r^{\frac{1}{2}}$$

$$(\sqrt{r})^2 = 4^2$$

$$(\sqrt{r})^2 = (r^{\frac{1}{2}})^2$$

$$r = 16$$

$$\text{EX 4)} \rightarrow y^2 = 25$$

$$\sqrt{y^2} = \sqrt{25}$$

$$y = \pm 5$$

$$\text{EX 5)} \quad 3(-5n + 8) = 237$$

$$\begin{array}{r} -15n + 24 = 237 \\ \underline{-24 \quad -24} \end{array}$$

$$\begin{array}{r} -15n \quad = 213 \\ \underline{-15} \quad \underline{-15} \end{array}$$

$$n = -14.2$$

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7-10, 12, 13, 16, 18, 26

$$8c) \quad |k-1| = 5$$

$$k-1 = 5 \quad \text{or} \quad k-1 = -5$$

+1 +1

$$k = 6$$

or

$$k-1 = -5$$

+1 +1

$$k = -4$$

9c) has two solutions

12 c) $\sqrt{x} + 3\sqrt{x} - 5$ combine these two

$$4\sqrt{x} - 5$$

12 g) $3x^2 + 6x^2 = 36$ combine

$$\frac{9x^2}{9} = \frac{36}{9}$$

$$x^2 = 4$$

now solve but be careful. There are two solutions!!

$$16a) \quad 3[4 + \underline{(3)(-2)}] = 3x - (x - 10)$$

$$3[\underline{4 + -6}] = 3x - (x - 10)$$

$$\underline{3[-2]} = 3x - (x - 10)$$

$$-6 = 3x - \underline{1(x - 10)}$$

$$-6 = \underline{3x - x} + 10$$

$$-6 = 2x + 10$$

$$\begin{array}{r} -10 \\ \hline -16 = 2x \end{array}$$

$$\frac{-16}{2} = \frac{2x}{2}$$

$$-8 = x \Rightarrow \boxed{x = -8}$$

$$16c) \quad 15 - (9 - P) = \underline{14\left(\frac{1}{2}\right)} - \underline{3\left(\frac{2}{3}\right)}$$

$$15 - (9 - P) = 7 - 2$$

hint: use \rightarrow
the distribution
property.

now finish

$$16d) \quad \frac{1}{4}(8x) - 2(15 - \frac{1}{2}x)$$
$$2x - \underline{2(15 - \frac{1}{2}x)}$$
$$2x - 30 + x$$

now finish