

Worksheet

05/15/2020

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Problem quickname: 9505

1)

Solve the equation: Determine the value of the variable. Combine like terms and perform equivalent transformations.

a) $156 - 1 = 2f - 3$ b) $7q + 3 = 5 + 320$ c) $530 - 4h = 4h + 2h$

2)

Solve the equation: Determine the value of the variable. Combine like terms and perform equivalent transformations.

a) $319 + 3v = 12v - 5$ b) $8s - 2s = 252 - 3s$ c) $3f + 6 = 4 + 44$
d) $-4r + 44 = -3 + 3$ e) $-4z + 2 = -364 + 2$ f) $-e + 3e = 8e - 342$
g) $-6k - 6 = -4 - 410$ h) $3q - 3 = 142 - 4$ i) $9n - 2 = -1 + 692$

3)

Solve the equation: Determine the value of the variable. Combine like terms and perform equivalent transformations.

a) $-3 + 1 = -482 + 10u$ b) $-3b + 5 = -230 + 1$
c) $i + 5i = -243 + 9i$ d) $-5r - 3 = -1 - 202$
e) $-8d + 2 = -4 - 602$ f) $-6s - 2s = -161 + 1$
g) $-3y + 203 = -7 + 3$ h) $-2p - 4p = -2 - 496$
i) $-8f + 2 = 4 - 466$

4)

Solve the equation: Determine the value of the variable. Combine like terms and perform equivalent transformations.

a) $-2r - 3 = -12r + 307 \quad | + \boxed{}$
 $\boxed{-} \boxed{r} = \boxed{-} \boxed{r} + \boxed{} \quad | + \boxed{}$
 $\boxed{r} = \boxed{} \quad | : \boxed{}$
 $r = \boxed{}$

b) $9g - 298 = -3 + 2 \quad | \text{ rearrange and combine like terms}$
 $\boxed{g} - \boxed{} = \boxed{} \quad | + \boxed{}$
 $\boxed{g} = \boxed{} \quad | : \boxed{}$
 $g = \boxed{}$

c) $7w + w = 300 + 4$ | rearrange and combine like terms

$$\begin{array}{rcl} w & = & \boxed{} \\ & & | : \boxed{} \\ w & = & \boxed{} \end{array}$$

d) $212 - 4p = -1 - p$ | rearrange and combine like terms

$$\begin{array}{rcl} -\boxed{}p + \boxed{} & = & -p - \boxed{} \\ -\boxed{}p & = & -p - \boxed{} \\ -\boxed{}p & = & -\boxed{} \\ p & = & \boxed{} \end{array} \quad | - \boxed{}$$

e) $234 - 4 = 9n - 4n$ | rearrange and combine like terms

$$\begin{array}{rcl} \boxed{} & = & \boxed{}n \\ \boxed{} & = & \boxed{}n - \boxed{} \\ -\boxed{}n & = & -\boxed{} \\ n & = & \boxed{} \end{array} \quad | - \boxed{}$$

f) $2n + 2n = -1 + 361$ | rearrange and combine like terms

$$\begin{array}{rcl} \boxed{}n & = & \boxed{} \\ n & = & \boxed{} \end{array} \quad | : \boxed{}$$

g) $10n + 4 = 4 + 920$ | rearrange and combine like terms

$$\begin{array}{rcl} \boxed{}n + \boxed{} & = & \boxed{} \\ \boxed{}n & = & \boxed{} \\ n & = & \boxed{} \end{array} \quad | - \boxed{}$$

h) $5c + 2c = 2c + 270$ | rearrange and combine like terms

$$\begin{array}{rcl} \boxed{}c & = & \boxed{}c + \boxed{} \\ \boxed{}c & = & \boxed{} \\ c & = & \boxed{} \end{array} \quad | - \boxed{}$$

i) $-5c + 147 = 1 + 1$ | rearrange and combine like terms

$$\begin{array}{rcl} -\boxed{}c + \boxed{} & = & \boxed{} \\ -\boxed{}c & = & \boxed{} \\ c & = & \boxed{} \end{array} \quad | - \boxed{}$$

Good Luck!