



Check Up

1. Solve the following equations for the variable.

a. $12x = 156$

b. $147 = 21n$

c. $\frac{r}{8} = \frac{19}{5}$

d. $\frac{5}{6} = \frac{81}{p}$

►► **Multimedia**



A video demonstration of the solution for *Check Up 1d* is provided.



Compare your answers.

- Solve the following equations for the variable.

a. $12x = 156$

$$12x = 156$$

$$\frac{12x}{12} = \frac{156}{12}$$

$$\frac{\cancel{12}x}{\cancel{12}} = 13$$

$$x = 13$$

Check:

Left Side	Right Side
$12x$ $12(13)$ 156	156
LS = RS	

b. $147 = 21n$

$$147 = 21n$$

$$\frac{147}{21} = \frac{21n}{21}$$

$$7 = \frac{\cancel{21}n}{\cancel{21}}$$

$$7 = n$$

Check:

Left Side	Right Side
147	$21n$ $21(7)$ 147
LS = RS	

c. $\frac{r}{8} = \frac{19}{5}$

$$\frac{r}{8} = \frac{19}{5}$$

$$\frac{r}{8} \cdot 8 = \frac{19}{5} \cdot 8$$

$$\frac{r}{8} \cdot 8 = \frac{19}{5} \cdot 8$$

$$r = \frac{152}{5}$$

$$r = 30.4$$

Check:

Left Side	Right Side
$\frac{r}{8}$ $\frac{30.4}{8}$ 3.8	$\frac{19}{5}$ 3.8
LS = RS	

d. $\frac{5}{6} = \frac{81}{p}$

$$\frac{5}{6} = \frac{81}{p}$$

$$\frac{5}{6} \cdot p = \frac{81}{p} \cdot p$$

$$\frac{5}{6}p = 81$$

$$\frac{5}{6}p \div \frac{5}{6} = 81 \div \frac{5}{6}$$

$$\frac{\cancel{5}}{\cancel{6}}p \div \frac{\cancel{5}}{\cancel{6}} = 81 \div \frac{5}{6}$$

$$p = 81 \cdot \frac{6}{5}$$

$$p = \frac{486}{5}$$

$$p = 97.2$$

Check:

Left Side	Right Side
$\frac{5}{6}$ 0.8 $\overline{3}$	$\frac{81}{p}$ $\frac{81}{97.2}$ 0.8 $\overline{3}$
LS = RS	