

Solve each equation. Where appropriate, write INFINITELY MANY (IDENTITY) or NO SOLUTION. MUST SHOW WORK ON A SEPARATE PAPER TO RECEIVE CREDIT!

1.) $7 - 2n = n - 14$

2.) $3d + 8 = 2d - 7$

3.) $3(x - 1) = 5x + 3 - 2x$

4.) $-4.4w - 2 = -5.5w - 4.2$

5.) $8z - 7 = 3z - 7 + 5z$

6.) $\frac{1}{2}d - \frac{3}{4} = \frac{3}{5}d$

7.) $8 - 3(p - 4) = 2p$

8.) $3(2f + 4) = 2(6f - 6 - 3f)$

9.) $4.3v - 6 = 8 + 2.3v$

10.) $\frac{2}{3}(6x + 3) = 4x + 2$

11.) $\frac{g}{4} = \frac{7}{8}$

12.) $\frac{3}{6} = \frac{x-3}{8}$

13.) $\frac{2x-2}{14} = \frac{2x-4}{6}$

14.) $6 + 4p - 16 = p + 3p - 2p$

15.) $\frac{m+12}{9m} = \frac{5}{9}$

16.) $6(6h - 2) + 8(1 - 5h) = 2h$

17.) $\frac{3}{5}k - \frac{1}{10}k - 4 = \frac{1}{2}k + 1$

18.) $4(b - 1) = -(4 + 4b)$

Determine the mistake of the worked-out problems below, then state the correct answer.

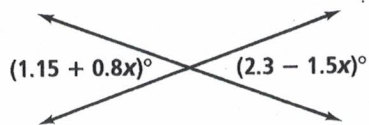
19.)

$$\begin{aligned} 2x &= 11x + 45 \\ 2x - 11x &= 11x - 11x + 45 \\ 9x &= 45 \\ \frac{9x}{9} &= \frac{45}{9} \\ x &= 5 \end{aligned}$$

20.)

$$\begin{aligned} 4.5 - y &= 2(y - 5.7) \\ 4.5 - y &= 2y - 11.4 \\ 4.5 - y - y &= 2y - y - 11.4 \\ 4.5 &= y - 11.4 \\ 4.5 + 11.4 &= y - 11.4 + 11.4 \\ 15.9 &= y \end{aligned}$$

21.) Find the value of x:



22.) Find the perimeter of the triangle below:

