

Practice Makes Perfect

KEY



Use *cross-products* to solve each *proportion* for the indicated variable. See if you can recognize the distributive property as you work through some of these problems. Show all of your work.

1. $\frac{x}{3} = \frac{5}{9}$

$x = \frac{5}{3}$

2. $\frac{y}{7} = \frac{3}{14}$

$y = \frac{3}{2}$

$(x)(9) = (3)(5)$

3. $\frac{2}{w+2} = \frac{2}{2w+1}$

$w = 1$

4. $\frac{2n+1}{2} = \frac{n+2}{4}$

$n = 0$

$2(2w + 1) = 2(w + 2)$

5. $\frac{b+2}{3} = \frac{3b+1}{3}$

$b = \frac{1}{2}$

6. $\frac{3}{2z} = \frac{5}{z+3}$

$z = \frac{9}{7}$

7. $\frac{d+4}{3} = \frac{d+13}{6}$

$d = 5$

8. $\frac{3}{m+1} = \frac{7}{2m+3}$

$m = 2$

9. $\frac{n+12}{4} = \frac{n}{16}$

$n = -16$

10. $\frac{a+2}{5} = \frac{a-4}{7}$

$a = -17$

Scrambled answers: $-\frac{17}{1}, -16, \frac{1}{2}, \frac{9}{7}, \frac{5}{3}, \frac{3}{2}, \frac{1}{2}, 1$