

**Equations Worksheet 23**

For exercises 1-18, solve each proportion. Remember to show your work.

**1.**  $\frac{2}{5} = \frac{12}{n}$

**2.**  $\frac{3}{4} = \frac{9}{n}$

**3.**  $\frac{6}{2} = \frac{21}{n}$

**4.**  $\frac{10}{4} = \frac{n}{6}$

**5.**  $\frac{5}{15} = \frac{n}{9}$

**6.**  $\frac{12}{8} = \frac{n}{4}$

**7.**  $\frac{2}{n} = \frac{5}{25}$

**8.**  $\frac{33}{n} = \frac{11}{3}$

**9.**  $\frac{49}{n} = \frac{7}{10}$

**10.**  $\frac{n}{6} = \frac{6}{9}$

**11.**  $\frac{n}{4} = \frac{18}{72}$

**12.**  $\frac{n}{2} = \frac{50}{20}$

**13.**  $\frac{14}{n} = \frac{7}{4}$

**14.**  $\frac{8}{12} = \frac{12}{n}$

**15.**  $\frac{n}{13} = \frac{4}{1}$

**16.**  $\frac{24}{6} = \frac{n}{5}$

**17.**  $\frac{n}{10} = \frac{40}{25}$

**18.**  $\frac{24}{n} = \frac{30}{100}$

For exercises 19 - 29, solve the equation. Be sure to show your work.

19.  $\frac{3}{4}w = -48$

20.  $-13 = \frac{n}{-4}$

21.  $9 - 4w = -11$

22.  $\frac{p}{-6} + 7 = -14$

23.  $-9 = \frac{t - 8}{4}$

24.  $6 - \frac{3}{5}y = 9$

25.  $6 - 2y = 7y + 13$

26.  $3x - 5(x - 6) = 10 - x$

27.  $\frac{3}{5}x - 4 = \frac{1}{2}x$

28.  $2.6n - 5 = 2.1n + 4.5$

29.  $5(12 - 3p) = 15p + 60$

For exercises 30-32, solve the equation for the specified variable. Be sure to show your work.

30.  $ax - n = v$  for  $x$

31.  $\frac{4y + t}{r} = s$  for  $t$

32.  $\frac{4y + t}{r} = s$  for  $y$