equations and reasoning 1

Date_____ Period____

Find the value of x that makes the equation true.

1) $\frac{x}{2} = \frac{3}{8}$

2) $\frac{9}{3} = \frac{b}{6}$

3) $\frac{7}{a} = 3$

4) $\frac{3}{7} = \frac{5n}{3}$

5) $\frac{n+4}{9} = \frac{8}{6}$

6) $\frac{x-6}{7} = \frac{3}{6}$

7) $\frac{7}{k-3} = \frac{3}{2}$

8) $\frac{7}{4} = \frac{10}{r+1}$

9) $\frac{9}{4} = \frac{3}{x-1}$

10) $\frac{3}{x-5} = \frac{5}{6}$

11) $\frac{5}{v+5} = \frac{10}{9}$

12) $\frac{a-5}{7} = \frac{4}{8}$

13) $\frac{n}{n-8} = \frac{7}{10}$

14) $\frac{n+1}{2} = \frac{n}{10}$

15) $\frac{8}{6} = \frac{x}{x-10}$

16) $\frac{n}{n-5} = \frac{7}{3}$

17) $\frac{8}{n} = \frac{2}{n-6}$

18) $\frac{n-4}{n} = \frac{5}{4}$

19) $\frac{5}{7} = \frac{x+1}{x+9}$

20) $\frac{5}{9} = \frac{p-8}{p-6}$

21) $\frac{n+8}{7} = \frac{n-10}{8}$

22) $\frac{8}{3} = \frac{n+8}{n-6}$

Find the value of x that makes the equation true.

23) $9 = \sqrt{x} + 9$

24) $9 = 7 + \sqrt{r}$

25) $\sqrt{x - 6} + 7 = 14$

26) $\sqrt{p - 8} = 2$

27) $-8\sqrt{x} = -24$

28) $\sqrt{m} = 5$

Find the value of x that makes the equation true.

29) $9 = \sqrt{\frac{k}{10}}$

30) $1 = \sqrt{n - 5}$

31) $5 = \sqrt{-5 - 6b}$

32) $10 = \sqrt{5k}$

33) $\sqrt{\frac{x}{8}} = 10$

34) $8 = \sqrt{-4 - 17k}$