

## 12-9 Quiz Review 2

Solve each equation. Remember to check for extraneous solutions.

1)  $\sqrt{2x+4} = 4$

2)  $-2\sqrt{n+3} = -18$

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

4)  $\sqrt{2-2x} = 4$

5)  $-2\sqrt[3]{x+4} + 3 = -3$

6)  $8\sqrt[4]{-2x+4} = 16$

7)  $\frac{1}{x} + \frac{1}{3x^2} = \frac{4}{3x^2}$

8)  $\frac{1}{3x^2} = \frac{x+4}{x^2} + \frac{5}{3x^2}$

9)  $\frac{3}{4x^2} + \frac{x-4}{4x^2} = \frac{1}{x}$

10)  $\frac{3}{5} - \frac{1}{n} = \frac{1}{5n}$

11)  $\frac{m+5}{m^2} + \frac{1}{5m} = \frac{2m+2}{5m^2}$

12)  $\frac{5}{n} = \frac{1}{n^2} + \frac{1}{n}$

$$13) \frac{3}{r^2} - \frac{1}{3r} = \frac{r^2 + 6r + 5}{r^2}$$

$$14) \frac{5}{m^2} = \frac{m^2 - 9m + 20}{2m^2} + \frac{1}{2}$$

$$15) \frac{p+3}{6p} + 1 = \frac{2p+4}{3}$$

$$16) \frac{5x-10}{2x} = 5 + \frac{5}{2x^2}$$

$$17) 1 + \sqrt{3n+51} = n$$

$$18) m = \sqrt{27-6m}$$

$$19) -7 = \sqrt{13-p} - p$$

$$20) \sqrt{2k+25} = \sqrt{-2-k}$$

$$21) \frac{1}{x^2+x} = \frac{6}{x} + \frac{5}{x^2+x}$$

$$22) \frac{3x+18}{x} = \frac{1}{x} + 1$$

$$23) \frac{1}{v} + \frac{1}{v^2-5v} = \frac{5}{v^2-5v}$$

$$24) \frac{1}{2m^2+4m} = \frac{5}{2m^2+4m} - \frac{5}{2m+4}$$

## Answers to 12-9 Quiz Review 2 (ID: 1)

1)  $\{6\}$   
5) 23

2)  $\{78\}$   
6) -6

3)  $\{106\}$   
7)  $\{1\}$

4)  $\{-7\}$   
8)  $\left\{-\frac{16}{3}\right\}$

9)  $\left\{-\frac{1}{3}\right\}$

10)  $\{2\}$

11)  $\left\{-\frac{23}{4}\right\}$

12)  $\left\{\frac{1}{4}\right\}$

13)  $\left\{-6, -\frac{1}{3}\right\}$

14)  $\left\{2, \frac{5}{2}\right\}$

15)  $\left\{\frac{3}{4}, -1\right\}$

16)  $\{-1\}$

17)  $\{10\}$

18)  $\{3\}$

19)  $\{9\}$

20)  $\{-9\}$

21)  $\left\{-\frac{5}{3}\right\}$

22)  $\left\{-\frac{17}{2}\right\}$

23)  $\{9\}$

24)  $\left\{\frac{4}{5}\right\}$