

## Solving Equations TEST REVIEW

Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve each equation.**

1)  $16 = \frac{v}{3}$

2)  $14 = v + 1$

3)  $\frac{v}{1.9} = -3.1$

4)  $-7.6x = -139.08$

**Write an equation and solve to answer each question.**

5) Last Friday Lea had \$32. Over the weekend she received some money for weeding the garden. She now has \$40. How much money did she receive?

6) Lisa is cooking a cake. The recipe calls for 6 cups of water. She accidentally put in 7 cups. How many extra cups did she put in?

**Solve each equation.**

7)  $56 = -10 - 6x$

8)  $-3v - 9 = -30$

$$9) 17.65 = \frac{n}{2} + 8.9$$

$$10) \frac{0.9 + x}{2} = -4.65$$

**Write an equation and solve to answer each question.**

11) Jenny won 52 super bouncy balls playing hoops at the county fair. At school she gave three to every student in her math class. She only has 7 remaining. How many students are in her class?

12) Julia rented a bike from Kali's Bikes. It cost \$14 plus \$8 per hour. If Julia paid \$62, then she rented the bike for how many hours?

**Solve each equation.**

$$13) 8x - 6x = -6$$

$$14) -2.7r - 3 + 4.7r = -16.4$$

$$15) -135 = 5(8 + 7r)$$

$$16) 5p - 6 = 2 + 6p$$

$$17) -6 - 7n = 3(-2n + 6) - 7n$$

$$18) 6(n - 5) = 4(n - 3)$$

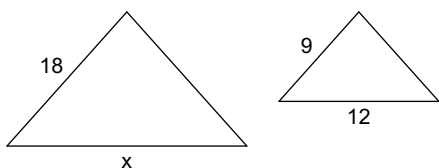
Solve each proportion. Leave your answers as an integer or decimal.

19)  $\frac{9}{x} = \frac{4}{6}$

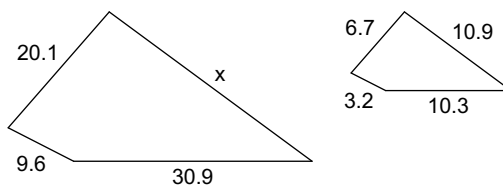
20)  $\frac{2}{6} = \frac{r}{9}$

Each pair of figures is similar. Find the missing side.

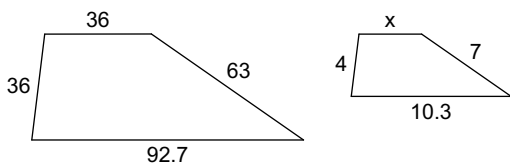
21)



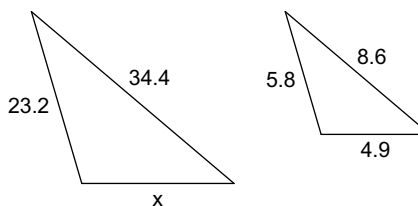
22)



23)



24)



Solve each proportion. Leave your answers as an integer or decimal.

25)  $\frac{3}{8} = \frac{a+4}{4}$

26)  $\frac{7}{3} = \frac{r+7}{7}$

$$27) \frac{p-4}{6} = \frac{p}{7}$$

$$28) \frac{x+2}{6} = \frac{x}{8}$$

$$29) \frac{3}{n-9} = \frac{7}{n+4}$$

$$30) \frac{9}{n-3} = \frac{10}{n-8}$$

**Solve each equation for the indicated variable.**

$$31) g = ca, \text{ for } a$$

$$32) g = a - c, \text{ for } a$$

$$33) x + m = n + p, \text{ for } x$$

$$34) \frac{m}{x} = \frac{p}{n}, \text{ for } x$$

$$35) -6x = 3w - v, \text{ for } x$$

$$36) g = 6a - b, \text{ for } a$$

## Answers to Solving Equations TEST REVIEW

1)  $\{48\}$

5)  $\$8$

9)  $\{17.5\}$

13)  $\{-3\}$

17)  $\{4\}$

21)  $24$

25)  $\{-2.5\}$

29)  $\{18.75\}$

33)  $x = -m + n + p$

2)  $\{13\}$

6)  $1$

10)  $\{-10.2\}$

14)  $\{-6.7\}$

18)  $\{9\}$

22)  $32.7$

26)  $\{9.33\}$

30)  $\{-42\}$

34)  $x = \frac{mn}{p}$

3)  $\{-5.89\}$

7)  $\{-11\}$

11)  $15$

15)  $\{-5\}$

19)  $\{13.5\}$

23)  $4$

27)  $\{28\}$

31)  $a = \frac{g}{c}$

35)  $x = \frac{-3w + v}{6}$

4)  $\{18.3\}$

8)  $\{7\}$

12)  $6$

16)  $\{-8\}$

20)  $\{3\}$

24)  $19.6$

28)  $\{-8\}$

32)  $a = g + c$

36)  $a = \frac{g + b}{6}$