Name: _____ Period: _____ Date: _____

Unit 2 - Solving Equations Review Guide

1. **Find the solution of $c + 12 = 12$.**

_____

2. **Find the solution of $-3g = 42$.**

_____

3. **Find the solution of $\frac{b}{-4} = 5$.**

_____

4. **Find the solution of $3y + 7 = -11$.**

_____

5. **Find the solution of $\frac{d}{18} + 6 = 16$.**

_____

6. **Find the solution of $7(f - 9) = 63$.**

_____

7. **Find the solution of $8x - 5x - 4 = 14$.**

_____

8. **Find the solution of $\frac{234z}{500} - 3z - 1 = -1$.**

_____

9. **Solve $\frac{t}{9} + 2\left(\frac{t}{18} + 4\right) = 10$.**

_____

10. **Solve of $a - 100 = -16a - 15$.**

_____

11. **Solve $-3z - 1 = +2z - 1$.**

_____

12. **Solve $\frac{h}{2} + 3 = 3(\frac{h}{4} - 1)$.**

_____

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13. Find the value of y for the value of x given.

$-4y = 5x + 8$; $x = 1$

_____

14. Solve the equation for the variable given.

$4p + qr = r - 3$; r

_____

15. What is the radius of the circle with Circumference 15cm? Take $\pi = 3.14$.

Radius = _____

16. Solve the proportion $\frac{y}{3} = \frac{5}{4}$.

y = _____

17. Eric is planning to bake approximately 384 cookies. If 3 pounds of cookie dough make 96 cookies, how many pounds of cookie dough should he make?

Cookie dough = _____

18. Solve the proportion $\frac{3}{s+1} = \frac{4}{s+4}$.

s = _____

19. Convert:

5 liters = _____ quarts

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20. Find the unit rate if 4 pounds of red chilies cost 5$.

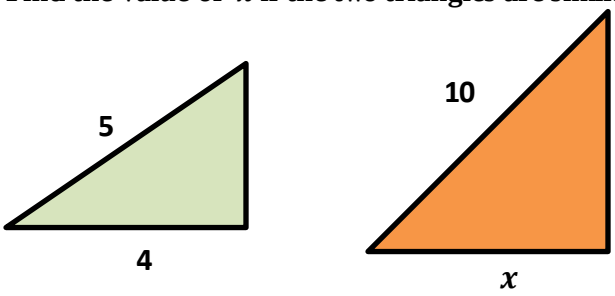
_____

21. Identify the best deal:

Deal 1: 10 pair of socks for 2$; Deal 2: 4 pants for 8$

_____

22. Find the value of x if the two triangles are similar.



x = _____

23. On a map, the length of a river is 4.75 km. What is the scale of the map if the actual length of the river is 247 km?

Scale = _____

24. The scale of a map is 0.5 inches : 10 km. Find the actual distance corresponding to the map distance of 6 inches.

Distance = _____

25. What is 6.5% of 20?

_____

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26. What percent of 85 is 51?

_____

27. A dining table with a set of chairs that costs 250$ are on sale for 30% of the regular price. What is the sales price of the dining table and the set of chairs?

Sale Price = _____

28. Adams bought a suit from a shop for 35$. Jack found the same suit on another shop for 29$. What is the percent decrease to the nearest percent?

Percent decrease = _____

29. A painter estimated that a wall is 20 ft. tall. The wall is actually 18 ft. What is the percent error in the estimation rounded to the nearest percent?

Percent Error = _____

30. A paper sheet is cut 28 inches to the nearest half inches. Find the maximum and minimum length of the patient possible.

Minimum length = _____

Maximum length = _____

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ANSWERS:

1. **Find the solution of $c + 12 = 12$.**

   ___$c = 0$___

2. **Find the solution of $-3g = 42$.**

   ___$g = -14$___

3. **Find the solution of $\frac{b}{-4} = 5$.**

   ___$b = -20$___

4. **Find the solution of $3y + 7 = -11$.**

   ___$y = -6$___

5. **Find the solution of $\frac{d}{18} + 6 = 16$.**

   ___$d = 180$___

6. **Find the solution of $7(f - 9) = 63$.**

   ___$f = 18$___

7. **Find the solution of $8x - 5x - 4 = 14$.**

   ___$x = 6$___

8. **Find the solution of $\frac{234z}{500} - 3z - 1 = -1$.**

   ___$z = 0$___

9. **Find the solution of $\frac{t}{9} + 2\left(\frac{t}{18} + 4\right) = 10$.**

Unit 2 - Solving Equations Review Guide

___$t = 9$___

10. Find the solution of $a - 100 = -16a - 15$.

___$a = 5$___

11. Find the solution of $-3z - 1 = +2z - 1$.

___$z = 0$___

12. Find the solution of $\frac{h}{2} + 3 = 3(\frac{h}{4} - 1)$.

___$h = 0$___

13. Find the value of y for the value of x given.

$-4y = 5x + 8$; $x = 1$

___$y = -3/4$___

14. Solve the equation for the variable given.

$4p + qr = r - 3$; r

___$r = \frac{-4p-3}{q-1}$___

15. What is the radius of the circle with Circumference 15cm? Take $\pi = 3.14$.

Radius = ___2.4 cm___

16. Solve the proportion $\frac{y}{3} = \frac{5}{4}$.

$y =$ ___$\frac{15}{4}$___

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Unit 2 - Solving Equations Review Guide

17. Eric is planning to bake approximately 384 cookies. If 3 pounds of cookie dough make 96 cookies, how many pounds of cookie dough should he make?

Cookie dough = ____12 pounds___

18. Solve the proportion $\frac{3}{s+1} = \frac{4}{s+4}$.

s = __9__

19. Convert:

5 liters = __5.3__ quarts

20. Find the unit rate if 4 pounds of red chilies cost 5$.

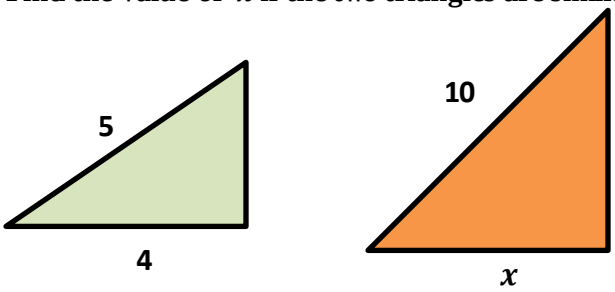
____0.8$/pounds____

21. Identify the best deal:

Deal 1: 10 pair of socks for 2$; Deal 2: 4 pants for 8$

_____Deal 1_____

22. Find the value of x if the two triangles are similar.



x = _____8_____

Unit 2 - Solving Equations Review Guide

23. On a map, the length of a river is 4.75 km. What is the scale of the map if the actual length of the river is 247 km?

Scale = ___ 1 inch : 52 km___

24. The scale of a map is 0.5 inches : 10 km. Find the actual distance corresponding to the map distance of 6 inches.

Distance = ____120 km_____

25. What is 6.5% of 20?

___1.3___

26. What percent of 85 is 51?

___60%___

27. A dining table with a set of chairs that costs 250$ are on sale for 30% of the regular price. What is the sales price of the dining table and the set of chairs?

Sale Price = ____175$____

28. Adams bought a suit from a shop for 35$. Jack found the same suit on another shop for 29$. What is the percent decrease to the nearest percent?

Percent decrease = ____17%_____

29. A painter estimated that a wall is 20 ft. tall. The wall is actually 18 ft. What is the percent error in the estimation rounded to the nearest percent?

Percent Error = ____11%____

Unit 2 - Solving Equations Review Guide

30. A paper sheet is cut 28 inches to the nearest half inches. Find the maximum and minimum length of the patient possible.

Minimum length = ____27.75 inches____

Maximum length = ____28.25 inches____